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*Striving  
To Be The  
Top Performer*



 **PHILLIPS  
PETROLEUM  
COMPANY**  
*Annual Report 1990*



## Phillips Petroleum in Brief

Phillips is based in Bartlesville, Okla., where the company was founded in 1917. Bartlesville is located in northeastern Oklahoma, some 50 miles north of Tulsa.

### Phillips is engaged in these businesses:

- Petroleum exploration and production on a worldwide scale.
- Petroleum refining and marketing, primarily in the United States.
- Chemicals production and distribution worldwide.

At year-end, Phillips had 22,411 employees, 89,676 stockholders and assets of \$12 billion. Company products and processes were licensed in 30 countries.

### The Cover:

#### **Striving to Be the Top Performer**

*Like the swimmer who practices hours on end to achieve a competitive edge, Phillips is going all out to be the industry's leading performer. This includes achieving high financial returns, being a superior investment for shareholders, providing top products to customers and a top-notch working environment for employees. Swimming, of course, is part of the Phillips performance tradition. The company has been national sponsor of U.S. Swimming since 1973.*

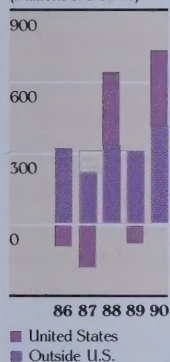
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# Highlights

**Net Income**  
(Millions of Dollars)



*Phillips' earnings—\$779 million—reached their highest point since 1984. Net income benefited from higher prices for crude oil and gas liquids, plus higher prices and production for natural gas.*

"Phillips," "the company," "we" and "our" are used interchangeably in this report to refer to the business of Phillips Petroleum Company and its consolidated subsidiaries. Where reference is made to a particular company, it is wholly owned unless otherwise stated. The company's consolidation policy is to include in financial statements the accounts of majority-owned, significant subsidiaries.

AgriSense, Alpha, Aspect, Crystalor, Driscopipe, K-Resin, Marlex, Permacore, Phillips 66, Ryton, SuperClean and TropArtic are trademarks for the company's products named in this report.

## Financial

	Millions of Dollars Except as Indicated		
	1990	1989	1988
Total revenues	\$13,975	12,492	11,490
Income before extraordinary item and cumulative effect of accounting change	\$ 541	219	650
Net income	\$ 779	219	650
Per dollar of revenue			
Income before extraordinary item and cumulative effect of accounting change	3.9¢	1.8	5.7
Net income	5.6¢	1.8	5.7
Per share of common stock			
Income before extraordinary item and cumulative effect of accounting change	\$ 2.18	.90	2.72
Net income	\$ 3.13	.90	2.72
Writedown of offshore California investments (after-tax)	\$ —	280	—
Interest expense	\$ 620	645	688
Total taxes charged to income before extraordinary item and cumulative effect of accounting change	\$ 876	508	675
Capital expenditures	\$ 1,383	872	797
Total assets at year-end	\$12,130	11,256	11,968
Dividends paid			
Common	\$ 256	229	157
Preferred	\$ —	—	11
Cash dividends per share			
Common	\$ 1.03	.94	.66
Preferred	\$ —	—	1.34
Average common shares outstanding (in thousands)	249,060	243,738	234,984
Common stockholders at year-end (in thousands)	89.7	94.0	96.9
Employees at year-end (in thousands)	22.4	21.8	21.0

## Operating

	Thousands of Barrels Daily		
Crude oil produced			
United States	95	102	110
Outside United States	123	116	112
Natural gas liquids produced	154	164	186
Total liquids produced	372	382	408
Crude oil refined	297	293	301
Petroleum products sold	579	588	585

	Millions of Cubic Feet Daily		
Natural gas produced	1,296	1,247	1,189

	Millions of Pounds		
Ethylene sales	1,124	576	720
Polyethylene sales*	607	1,541	1,612

\*U.S. polyethylene production facilities were destroyed by an explosion and fire in October 1989.



# Teaming Up For Top Performance

## Exploration & Production

■ Mainstay of “upstream” organization, E&P is Phillips’ largest group, with assets of \$4.3 billion and 7,800 employees. Explores for and produces oil and gas.

■ Profit heavily dependent on price of oil and gas. 1990 results were helped by 29 percent rise in the oil sales price. E&P net income was up 71 percent, excluding effect of 1989 asset writedown.

■ Promising developments: J-Block and Embla (both North Sea) and the South Marsh Island field in the Gulf of Mexico.

■ Major 1990 accomplishments: increasing reserves for fourth consecutive year, bringing on further U.K. gas production (Audrey), an aggressive drilling program and consequent gas sales from coal-seam project in New Mexico (San Juan Basin).

■ Strategy for top performance: Increase production levels/build reserves through balanced program of exploration, development and production. Attain greater international focus.

## Gas & Gas Liquids

■ Vital part of company’s integrated structure, G&GL gathers natural gas, extracts liquids and sells the residue gas. Gas liquids are used by company refineries and chemical plants as raw ingredients, or feedstocks, for gasoline and chemicals/plastics. Also sells liquefied natural gas (LNG) to Japanese customers via facilities in Kenai, Alaska.

■ Largest U.S. producer of gas liquids; operates 29 strategic plants and gathering systems, as well as 24,000 miles of gathering lines.

■ Profit based mainly on difference between cost of gas purchased and price of liquids extracted, plus value of residue gas sold. About 80 percent of gas gathered comes from outside (non-Phillips) sources. 1990 net income up 140 percent, mainly because of sharply (51 percent) higher gas liquids sales prices.

■ Strategy for top performance: Continue to consolidate assets and upgrade core facilities while securing new gas supplies.

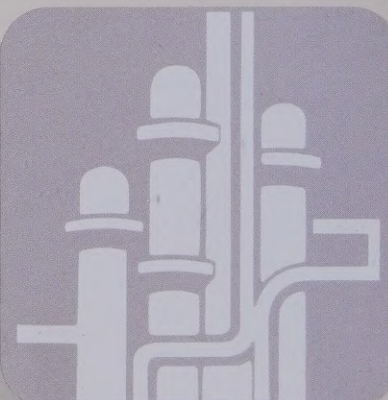
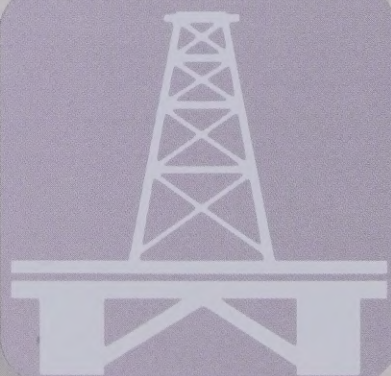
## Refining

■ Business of processing primarily crude oil into gasoline and other products of higher value.

■ Phillips has three U.S. refineries (Borger and Sweeny, TX; Woods Cross, UT) and part-ownership of a refinery in (Teesside) England. U.S. refining capacity 305,000 barrels a day. Facilities also process 173,000 barrels a day of natural gas liquids.

■ Profit determined largely by difference between cost of feedstocks versus value of petroleum products produced, such as gasoline. Margins were squeezed late in the year by rising oil prices. 1990 net income (includes marketing) fell 18 percent.

■ Strategy for top performance: Continue running refineries near capacity, while prudently making investments to produce cleaner-burning fuels.





## Marketing

- Face of company best-known to public, marketing encompasses some 9,300 service stations and other outlets flying Phillips 66 banner. Active marketing area covers 26 states.

- Independent dealers, or marketers, sell the bulk of company gasoline. About 97 percent of Phillips 66 service stations are marketer-owned.

- Cleaner-burning fuels made their debut in 1990. Sales of reformulated gasoline got under way in St. Louis and Denver; marketing of propane as fleet-vehicle fuel began in some areas.

- Strategy for top performance: Maintain high appearance standards for all Phillips 66 stations, while continuing to build high-volume, company-operated, retail stations. (These outlets accounted for about 15 percent of company gasoline sales in 1990.)

## Chemicals

- Value-added downstream sector; Chemicals accounts for revenues of more than \$2 billion. Strongest generator of profits during oil-price slump (1986-89).

- Main products include plastics and petrochemicals; also encompasses polyethylene pipe and polypropylene fibers manufactured by subsidiaries.

- U.S. polyethylene business destroyed by 1989 explosion and fire outside Houston. Restoring capacity is a major priority.

- New ethylene plant at Sweeny, Texas, scheduled to be operating in 1991; owned by partnership in which Phillips has 50 percent interest.

- 1990 net income off 34 percent on lower margins for olefins.

- Strategy for top performance: Increase capacity/sales for specialty-oriented chemicals, while continuing support of more basic chemicals and plastics.

## Technology

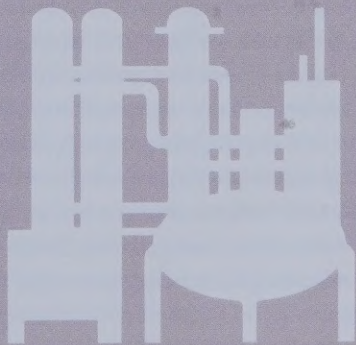
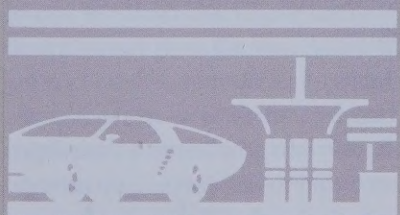
- Traditional strong suit, company R&D operations are responsible for many of Phillips' best-known and most successful products and processes—for instance, Marlex polyethylene and polypropylene, K-Resin copolymer, HF alkylation.

- Generates considerable licensing revenue (\$41 million in 1990).

- Heart of technology effort is 260-acre R&D complex in Bartlesville, employing about 900 personnel. Includes some four-dozen pilot plants in which new products are produced, and their properties fine-tuned, in small quantities.

- Recent focus has concerned research on cleaner-burning gasoline and diesel fuels; Phillips is participating in major oil/auto industry study for which company is producing reference fuels.

- Strategy for top performance: Improve commercialization rate, while reducing time of bringing new breakthroughs to market.





## Our Goal:

# Becoming the Top Performer in Everything We Do



C. J. Silas

*How are we to achieve top performance? One way is to give employees the tools to solve everyday problems that come up on the job. That's one reason Phillips is putting so much emphasis on the total quality performance effort. Total quality means seeing every task in light of a customer-supplier relationship; it stresses the importance of teamwork in making quality improvements. Phillips is adopting a total quality approach not because of quality problems, but because it will help achieve the continuous improvement that is so vital for top performance.*

### Fellow Shareholders:

The swimmer on this year's cover symbolizes our company's drive for top performance. We've always stressed performance at Phillips. In fact, we've been known for years as the "performance company" through our advertising.

Today top performance is at the heart of our corporate mission. This doesn't always mean being biggest or most profitable. But it does mean getting the most mileage from our assets and delivering the highest returns to our shareholders. Top performance also means making decisions today that set the stage for even bigger achievements later on.

Our 1990 results suggest we're on the right track. Net income last year rose to \$779 million, versus \$219 million in 1989. Several non-recurring items affected the earnings of both years, without which the difference between them would have narrowed. But in any case, 1990 was our best year in some time. Higher oil prices were key to the improvement as our exploration and production earnings bear out. And yet refining and marketing results—which usually suffer when oil prices are on the rise—were little changed from 1989 after adjusting for an environmental charge.

Also keep in mind that our company's average crude oil sales price last year

was \$22.28 a barrel, about \$5 more than in 1989, but far below its late-year highs. And natural gas prices, while up, remained near their depressed levels of recent years. That's an important factor in terms of income since Phillips produces almost as much gas as oil.

### Top-Flight Performance

Within our businesses, here are a few examples of the top-flight performance we saw last year:

■ In Exploration & Production, we added to reserves for a fourth straight year while keeping our finding costs very low—\$2.30 a barrel. Also production held steady as we took steps to develop several new sources of production.

■ We've made our Gas & Gas Liquids business more efficient by streamlining and reconfiguring our gathering and processing system. This effort has substantially reduced costs, so that when gas liquids prices rallied last year, much of the increase showed up as higher profit.

■ Moving downstream—to that part of the business which turns crude oil and gas liquids into gasoline and chemicals—our refineries continue to be among the industry's safest and most efficient. We're building more company-operated service stations—which move very high volumes of gasoline—and have made a



commitment to clean-burning fuels by starting the sale of reformulated gasoline and propane as a vehicle fuel, in selected markets.

■ Our chemicals business, a strong contributor in recent years, was less profitable in 1990 mainly because of a slowing economy. We did, however, make progress restoring our polyethylene production capacity at Houston and building a new, high-capacity ethylene plant at our Sweeny, Texas, complex. Completion of these projects will strengthen our position as a low-cost producer of basic chemicals and plastics.

■ Phillips continued improving its financial structure, too. Although debt reduction is no longer our first priority, a further reduction of \$127 million was made during the year. And we took some other important steps that will moderate interest costs in the years ahead.

### **The Persian Gulf Conflict**

Nothing less than sustained top performance will allow us to hold our course against the political and economic tides constantly sweeping our industry. As we write this, tensions are easing in the Persian Gulf after months of strife and warfare. Phillips has no production interests in the region, no downstream assets such as refineries there, and outside of the effect on oil prices, our businesses have felt little direct impact from the war. At the same time, we realize the conflict has had an unsettling influence on some of our employees, particularly those who have been on duty in the Gulf or have family members serving there.

We are also aware that world energy markets could be thrown out of balance for some time in the war's aftermath.

During the 1970s and 1980s, political decisions in the Middle East caused oil prices, and oil company profits, first to rise rapidly and then to collapse. The same thing could happen this time around: Oil prices that rose on fears of short supplies could be in for a rough landing once production resumes from Kuwait and Iraq.

### **Performance for the Long Haul**

Higher oil prices may be temporary. But the move toward top performance should make a lasting contribution to Phillips' investment value no matter what oil prices do. Building for the future requires steady focus; it takes planning based on long-term fundamentals rather than daily movements in the oil markets. We're taking a rather cautious view of oil prices—seeing them in the low \$20 range for the next few years—and have geared our plans accordingly.

This year's capital and investment budget of \$1.5 billion is about \$100 million more than we spent last year. We're planning to use these funds to move ahead with the development of established fields in the North Sea and pursue strong exploration prospects in other countries. Downstream, we'll keep making investments to help our refineries produce cleaner-burning fuels and to upgrade our supply lines. We'll also continue building company-retail service stations and concentrate on making our chemicals operations even more productive.

Looking farther down the road, we plan to stick with investments that enhance our integrated make-up. One of our greatest strengths, after all, is the ability to convert oil and gas into products that command higher value, such as gasoline and chemicals. Practically all the projects now under way or in our plans are built around this integrated structure—whether it's finding new supplies of oil and gas, improving our distribution system or expanding production of olefins and plastics.



*Glenn A. Cox*

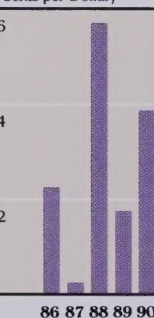


**Net Income Per Share**  
Dollars per Common Share)



Net income equaled \$3.13 a share in 1990, versus 90 cents a share the previous year, for an increase of 248%. The average number of shares outstanding increased about 2%.

**Profit Per Dollar Of Revenue\***  
(Cents per Dollar)



When expressed in terms of cents on each dollar of revenue, 1990 earnings were equal to 3.9 cents after making adjustments for non-recurring items. Net income, which includes these items, reached almost 6 cents per dollar of revenue.

\*Before extraordinary item and cumulative effect of accounting change.

We also see Phillips becoming more global in terms of our exploration and production programs and chemical operations. About 85 percent of our exploratory acreage is located abroad, and we're spending over half our exploration dollars outside the United States. It's also likely we'll take a more international approach for some of our future expansions in chemicals. And with the support of our technology effort—one of the industry's most respected—we'll continue developing new products in areas like olefins and plastics, where our record is strong.

### Building Investment Value

The objective of pursuing top performance is for our shareholders to realize maximum returns on their investment. Our record on this score has been quite good lately. Over the five-year period 1986-90, total shareholder return averaged 23 percent a year, well above our long-term objective of 15 percent. Last year we fell short of our goal but, in achieving a return of 7 percent, outdid the overall stock market for a fourth straight time. We also increased our dividend by 12 percent, to an annual rate of \$1.12 a share.

We know many shareholders look beyond earnings and stock price in assessing investment value. They look to the values we do business by—maintaining safety, giving customers a fair shake and respecting our resources in such a way that today's economic growth does not impair tomorrow's quality of life. Because high values are part of our foundation for top performance, last year we established 12 specific "Principles of Performance" that spell out our standards for operating in harmony with the environment and with other people.

We also feel that delivering top performance for shareholders means having employees who can identify with shareholder concerns. That's one reason we're compensating our employees to a greater extent with company stock. Last year, employee ownership through

company benefit plans reached about 24 percent of total shares outstanding, the highest of any major oil company. We feel that a high degree of employee ownership is one of the best ways of delivering maximum value to our stockholders.

### Veteran Directors Stepping Down

As a final note, two of our longest-serving directors, Dr. Clarke Wescoe and Frank Wheat, will be retiring from our board in May. We will miss their wisdom and perspective and express our thanks for their more than 40 years' combined service to our shareholders.

Our record of accomplishment for 1990 is contained in the following pages, along with more details about our plans for the future. We appreciate your support and pledge that we'll keep working to make Phillips the industry's leading performer in the months and years ahead.

For the Board of Directors,

C. J. Silas  
Chairman and  
Chief Executive Officer

Glenn A. Cox  
President and  
Chief Operating Officer

March 11, 1991

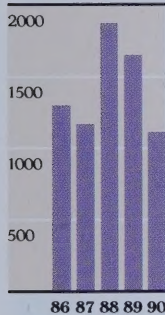


## Financial Summary

# Company's Financial Condition Shows Further Improvement

*Phillips' mission of being a top performer extends to shareholder return as well as to an improving capital structure, comments company chief financial officer Jim Mulva: "Our goal is to achieve attractive returns from our operations and capital programs in order to increase our share price and dividends." Phillips, he says, plans to strengthen its balance sheet by keeping debt near present levels and increasing equity through retained earnings. "We believe this plan should support our share price and the value of our debt securities," Mulva states.*

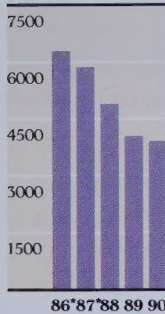
**Cash Flow From Operations**  
(Millions of Dollars)



\*Includes \$610 million in payments for certain tax issues.

*Despite higher earnings, cash flow dipped to \$1.1 billion (versus \$1.65 billion in 1989). The decline resulted mainly from \$610 million in payments on certain tax matters.*

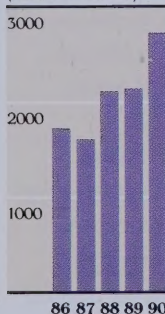
**Total Debt At Year-End**  
(Millions of Dollars)



\*Includes preferred stock.

*Although the pace of debt reduction slowed, total debt edged down by \$127 million, to \$3.9 billion at year-end. The company plans to keep debt near present levels.*

**Stockholders' Equity at Year-End**  
(Millions of Dollars)



*In line with strong 1990 performance, Phillips stockholders' equity rose by \$587 million, to \$2.72 billion at year-end. Stockholders' equity is the difference between a company's assets and liabilities.*

### A Commitment to Shareholder Value

■ **Superior Total Return.** Phillips seeks to provide a total return to shareholders of some 15 percent a year over time, while also striving to rank among the oil industry leaders in this category. Total return—which includes share-price appreciation plus dividends—was a little more than 7 percent in 1990, versus a decline in the general stock market of about 3 percent. For the five years 1986-90, Phillips' total return averaged about 23 percent a year, among the highest in the industry.

■ **Competitive Dividend Treatment.** Phillips increased its quarterly dividend rate by 12 percent in 1990, to 28 cents a share effective with the fourth-quarter payment. This was the fourth dividend increase since mid-1988 for a cumulative increase over that time of 87 percent. "Our objective is to pay a competitive dividend, as it relates to our stock price, earnings and cash flow," Mulva says.

### An Improving Financial Position

■ **Debt Down/Equity Strengthened.** Total debt equaled about \$3.9 billion at year-end, down \$127 million for the year. Management believes debt on its present scale represents an appropriate use of leverage to enhance shareholder returns and thus plans to keep debt near the current level.

Due to strong earnings, Phillips' net worth, or shareholders' equity, increased by \$587 million in 1990, to \$2.7 billion at year-end. Total debt as a percent of capital improved to 59 percent at year-end, compared with 65 percent at the end of 1989.

■ **Interest Expense Declining.** As a result of further debt reductions and refinancing activity, total interest expense on debt declined by \$72 million in 1990. Roughly \$350 million of high-cost debt (average interest rate of more than 14 percent) was refinanced at lower rates during the year. The company plans to refinance the remaining \$2 billion of high-cost debt, callable in 1992, by arranging additional lines of credit and issuing public debt. At current interest rate levels, this would reduce pretax interest payments by roughly \$100 million a year.

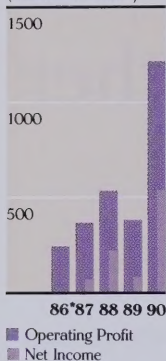
■ **Liquidity Maintained.** Cash balances ended the year at \$670 million, about the same as the previous year. Although debt reduction slowed in 1990, capital expenditures were increased and substantial payments were made to reduce interest accruals on disputed tax matters. In addition, Phillips had nearly \$600 million of unused committed lines of credit available at year-end.



## Exploration & Production

# Higher Oil Prices Boost Profit; Major Developments on Track

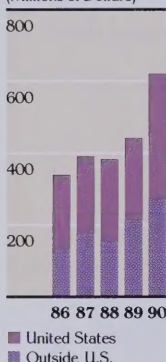
### Earnings (Millions of Dollars)



Buoyed by higher crude oil and natural gas prices, E&P operating and net earnings more than tripled. Net income was \$550 million, while operating profit reached \$1.23 billion. An asset writedown sharply reduced 1989 results.

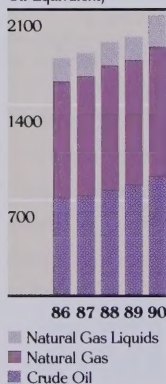
\*Operating profit basis; net income not available.

### Capital Expenditures (Millions of Dollars)



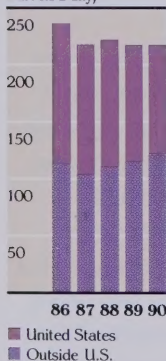
E&P capital spending rose 37%, with domestic and foreign spending roughly in balance. Biggest items: South Marsh Island, San Juan Basin, Ekofisk waterflood and the Harriet field acquisition.

### Worldwide Proved Reserves (Millions of Barrel-Oil-Equivalent)



In rising 8%, reserves were up for a fourth straight year in 1990. The company replaced almost two barrels for every one produced during the year on a BOE basis, and additions topped production in all three hydrocarbon categories.

### Net Crude Oil Production (Thousands of Barrels Daily)



At 218,300 barrels a day, crude oil production was on a par with 1989. Higher foreign production (up 6%) offset declining production from mature domestic fields (down 7%).

Commenting on Exploration & Production's determination to be a top performer, senior vice president Wayne Allen pointed to outstanding safety performance, replacement of produced reserves for a fourth consecutive year, low finding-and-development costs, an expanding exploration program and the rapid development of several major oil and gas projects—notably at the South Marsh Island field and San Juan Basin in the United States and at Audrey and Embla in the North Sea. Comments Allen, "All these projects involve considerable production and are being developed in relatively short periods. They represent the kind of commitment it takes to be a top performer."

### Net Income Moves Higher

Exploration & Production (E&P) net income was \$550 million, versus \$102 million in 1989. The increase came as a result of higher crude oil and natural gas revenues and mainly reflected a \$5.07 a barrel increase in the company's average crude oil sales price. Also, 1989 results were depressed by a writedown of offshore California assets, which reduced E&P net income by \$220 million. Without the writedown, E&P results would have been up 71 percent.

### Capital Expenditures Up 37 Percent

During the year, \$619 million of the company's capital expenditures were directed to exploration and production efforts, about 37 percent more than in 1989. Domestic spending was up by 41 percent, while foreign spending rose 33 percent. Largest expenditures included acquisition of an interest in Australia's Harriet field, development of the South Marsh Island field, a coal-seam gas project in the San Juan Basin and continued work on the Ekofisk-field waterflood.

For 1991, Phillips plans to devote 43 percent of its capital expenditure and investment budget—\$640 million—to E&P projects. Largest expenditures are planned for the Ekofisk waterflood

project and for the Embla (formerly South Eldfisk) development, both in the North Sea, as well as for a gas project in Australia.

### E&P Building on Strengths

Keynoting E&P competitive strengths are a consistently strong reserves-replacement record and among the industry's lowest finding-and-development costs. Additionally, Phillips reserves are located in secure parts of the world and are well-balanced between oil and gas.

### Reserves Replacement Strong

For a fourth straight year, Phillips in 1990 more than replaced all the hydrocarbon reserves it produced. Reserves replacement equaled 188 percent of worldwide production and 182 percent of domestic production on a barrel-of-oil-equivalent (BOE) basis. Importantly, production was more than offset by new discoveries, extensions and improved recovery. These additions equaled 133 percent of worldwide production.

In reaching just above 2 billion barrels-equivalent, total reserves were up 8 percent, including a 7 percent increase for crude oil, 4 percent for natural gas and 36 percent for natural



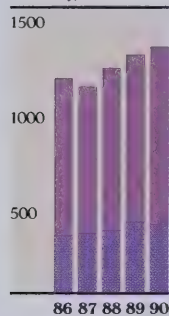


*Heading for a berth in the Gulf of Mexico some 200 miles offshore, the production platform for Phillips' South Marsh Island field was put in place late in the year. Phillips has a 100% interest in the field, where production is scheduled to begin in early 1991.*



### Net Natural Gas Production

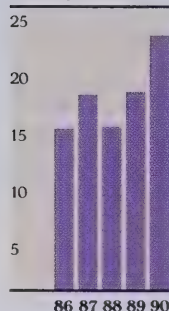
(Millions of Cubic Feet Daily)



*Natural gas production was up 4%, mainly due to higher domestic output. Most of the increase came from the Gulf of Mexico and San Juan Basin.*

### Average Worldwide Crude Oil Sales Price

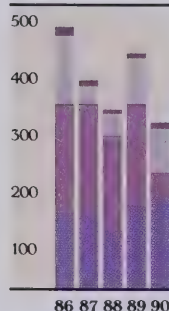
(Dollars per Barrel)



*The company's average crude oil price was \$22.28 a barrel in 1990, up 29% from the previous year and the highest since 1985. Prices rose strongly in the wake of the Persian Gulf crisis, averaging more than \$30 a barrel in the fourth quarter.*

### Exploration Expenses

(Millions of Dollars)



*Expenses were down 28%, mainly because of a big drop in leasehold impairment. In 1989, leasehold impairment was much higher due to the writedown of offshore California assets.*

gas liquids. Largest additions took place in the San Juan Basin, North Sea and Nigeria.

Also an advantage, Phillips reserves tend to be located in politically stable areas and show a good balance between oil and gas. Nearly 60 percent of company reserves (BOE) are located in North America, with more than 90 percent being in North America, the United Kingdom and Norway. With respect to balance, natural gas accounts for nearly half of the company's total worldwide reserves and slightly more than half of North American reserves.

### Finding & Development Costs Low

In addition, Phillips continued to keep the costs associated with adding new reserves in check. Company finding-and-development costs were \$2.30 a barrel for 1990 and \$2.35 a barrel for the period 1986-90. Partly as a result of waterflooding and the innovative use of applied technology, these costs have been among the industry's lowest in recent years.

### Exploration Program Active

Stressing a continuing worldwide focus, Phillips in 1990 participated in discoveries in five countries—the United States, United Kingdom, Nigeria, Australia and Canada—and also acquired acreage in five countries. The largest accumulation was 567,000 net acres in Papua New Guinea.

### Production Holding Stable

Crude oil production continued at some 218,000 barrels a day, as higher foreign production offset declining domestic output. Increased production from Norway, Nigeria, Indonesia and Egypt, as well as production from newly acquired interests in Australia, led to a 6 percent increase in foreign output. U.S. production fell 7 percent due to a natural decline in mature fields. Worldwide natural gas production rose 4 percent, mainly as a result of higher U.S. output.

### Phillips Oil & Gas Production (Net)

	1990	1989
	Barrels Daily	
<b>Crude Oil</b>		
United States	94,700	102,000
Norway	67,900	66,200
Nigeria	23,500	21,300
United Kingdom	14,900	16,400
Canada	4,700	5,400
Argentina	3,900	3,900
Indonesia	3,500	1,100
Australia	2,600	—
Egypt	2,600	1,800
	218,300	218,100

	Millions of Cubic Feet Daily	
<b>Natural Gas—Wet Basis</b>		
United States	927	874
Norway*	248	264
United Kingdom*	83	71
Canada	38	38
	1,296	1,247

\*Dry basis.

### North America: Major Activity Under Way at San Juan, Gulf of Mexico

■ **San Juan Basin.** Phillips continued an aggressive coal-seam gas project in the San Juan Basin of northwestern New Mexico. During the year, the company participated in 195 wells, 59 of which were connected, resulting in net coal-seam gas production of 42 million cubic feet a day (MMCFD) at year-end.

■ **Gulf of Mexico.** Phillips carried out an active program in the area in 1990, participating in seven discoveries and 18 exploratory wells (includes joint-venture wells), while acquiring nearly 150,000 net acres. The company plans 42 exploratory and development wells in the Gulf in 1991.

One significant source of new gas production came on line during the year in the Gulf of Mexico, as another neared completion. A field in the South Timbalier area, offshore Louisiana,



began producing in January 1990 and by year-end was adding about 30 MMCFD of gas to company production. Meanwhile, a larger field, in the South Marsh Island area, was in final stages of development at year-end and is expected to begin production in early 1991. An indication of the company's commitment to top performance, the field is scheduled to begin production about two years after its discovery—a shorter-than-usual period. Net production rates could exceed 90 MMCFD of gas and 5,000 barrels a day of liquids during 1991, making it one of the company's largest new sources of domestic production in recent years.

■ *North America Joint Venture.* Drilling continued as part of the North America Joint Venture, involving Phillips and companies from Taiwan and Korea. During the year, 26 wells were drilled on joint-venture acreage, resulting in four commercial discoveries. Five other wells were being evaluated at year-end for their commercial potential.

■ *Point Arguello.* Regulatory delays in 1990 continued to hold up production from the Point Arguello field, offshore California, in which Phillips holds a major interest. However, Phillips and its co-venturers at year-end were pursuing plans that could lead to operations beginning by mid-1991. Under the plan, production at a reduced rate would be shipped through an existing network of pipelines to various California refineries. The plan was devised after a local government agency turned down a proposal allowing full-scale production to be transported by tanker until a larger pipeline system was built.

■ *Alaska.* Late in the year, Phillips charged to expense a high-potential exploratory well in the Camden Bay area adjacent to Alaska's Arctic National Wildlife Refuge, terming it an expendable exploratory well. Results were not disclosed. Phillips acquired some 2,057 acres in Alaska during the year.



*Activity in the San Juan Basin heated up in 1990 as Phillips participated in 195 coal-seam gas wells in the region. These wells tap into coal seams, where methane gas is trapped. San Juan coal-seam gas was adding some 42 MMCFD to Phillips production at year-end.*





*Viewed from Varanus Island, some 80 miles off Australia's northwest coast, these Harriet-field platforms are symbolic of a growing emphasis on frontier prospects. Phillips in 1990 netted some 2,600 barrels of oil production a day from its 25% interest in Harriet.*

Also in 1990, Phillips announced it would invest in additional gas-handling facilities at the Prudhoe Bay field as a means of increasing oil production. At year-end, net production from Prudhoe Bay was 22,000 barrels of oil a day, equal to nearly one-quarter of the company's domestic oil production.

■ **Canada.** Production commenced from four new gas-producing areas in Canada at a combined net rate of about 18 MMCFD. Included were sections of the Ghost River and Progress fields, both in Alberta province. Also initiated was a project to evaluate steam stimulation at an oil field in Saskatchewan province. This process, in which steam is injected into the reservoir, is used to dislodge heavy oil.

#### **International: Norway/U.K. Projects Expected to Bolster Production**

■ **Norway.** Phillips' share of crude oil production from the seven-field Greater Ekofisk Development, located in the Norwegian North Sea, rose slightly and remained well above levels of the mid-1980s. The increase has resulted mainly from expansion of the Ekofisk waterflood program, which became operational in 1987. The project is expected to cover 12 square miles of the Ekofisk field when completed in 1992.



to 450 MMCFD. However, an equity redetermination reduced Phillips' interest to 18 percent, from the previous 23 percent. In addition, a successful appraisal well was drilled at the Ann gas field, north of Audrey, where production could commence in 1992.

Crude oil production from the Maureen field was down for the year but was augmented by production from the nearby Moira field beginning in the summer. Using Maureen production facilities, Moira was contributing some 1,500 barrels a day to company production at year-end.

In addition, a development program to produce some 25 net billion cubic feet of gas reserves was completed at the Hewett field, the company's longest-lived North Sea producer.

#### **Other International Areas: Frontier Effort Stepped Up**

In areas outside the United States and North Sea, Phillips in 1990 commenced one of its most aggressive exploration programs in recent years. Capital spending in these areas—notably Africa and Australia—rose strongly in 1990 and is expected to continue at a high rate in 1991. Exploratory drilling took place during the year in Somalia and Gabon, with further exploration activity being carried out in Australia.

Exploration programs are scheduled to begin in Papua New Guinea and Italy in 1991.

■ *Nigeria.* Production was up 10 percent from Nigeria—Phillips' third-largest source of oil production by country—where the company holds an interest in four producing licenses. Phillips participated in six exploratory and development wells in Nigeria during the year and moved ahead with plans to take part in building a gas liquids plant in the southern part of the country.

■ *Egypt/Other Africa.* Phillips expanded its activity in other parts of Africa by drilling six wells, including two successful appraisal wells and one development well in Egypt. Phillips' share of Egyptian production was up 44 percent for the year.

Also in 1990, the company received approval from the Norwegian government for development of the Embla field, which is immediately south of Greater Ekofisk. The field is expected to begin production in late 1992 at a rate of about 20,000 net barrels a day, making it one of the company's larger developments. One appraisal well was drilled at Embla during the year; another such well was under way at year-end.

Exploration activity continued in 1990 in the Greater Ekofisk area, where one exploratory well was completed and another was being drilled at the end of the year.

■ *United Kingdom.* The U.K. sector of the North Sea continued to emerge as an area of growing emphasis. Notes senior vice president Allen, "Our development projects in the U.K. hold great promise in terms of significant future production. And there are several prospects not yet under development that could prove very attractive."

In 1990, the company took part in 17 exploratory and appraisal wells in the United Kingdom and moved toward developing the Joanne and Judy (J-Block) fields, which are regarded as an appealing source of future production. Development planning was accelerated on J-Block, where production is expected to begin by the mid-1990s. Phillips also increased its ownership in the block to 36 percent.

South of J-Block, discoveries were made at the Jacqui and Janice fields. Appraisal drilling (Jacqui) and a seismic program (Janice) are scheduled for 1991.

■ *U.K.: Audrey/Maureen.* A second platform was installed at the Audrey field late in the year, raising gas production capacity by about one-third,

In the east African nation of Somalia, where the company holds some 10 million acres, Phillips drilled two exploratory wells, one of which had encouraging results but was abandoned due to mechanical problems. Late in the year, an exploratory well was begun in Gabon, located on Africa's western coast. Additional exploratory drilling is planned for both nations in 1991.

■ *Australia.* During the year, Phillips acquired a 25 percent interest in Australia's Harriet field, which contributed some 2,600 barrels of crude oil a day to company production. Also, three development wells were drilled and a gas discovery made. Gas production is expected to begin in 1992.

■ *Asia.* Production from a second field in Indonesia's Kakap block reached 4,150 barrels of oil a day by year-end, as net production from Indonesia more than tripled. Phillips participated in 13 development wells there during the year. The company also drilled a successful appraisal well in the South China Sea and at year-end was evaluating possible development.

**Strategies Stress Balanced Approach**  
E&P strategies emphasize a balance of exploration, development and production. Says Allen, "We're exploring in higher-risk areas to discover major reserves, while continuing an active program in mature areas where discoveries already have been made." Production, meanwhile, generates the funds needed for new development and exploration projects.

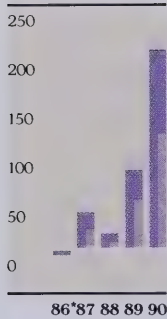
Top-performing E&P operations should strive to replace reserves on a consistent basis and increase production levels, in Allen's view. He expects company production to show an increase in the mid-1990s, thanks to development projects under way in the North Sea and United States, and says the company will continue working to build its reserve base.



## Gas & Gas Liquids

# Operations Rebound on Higher Liquids Prices

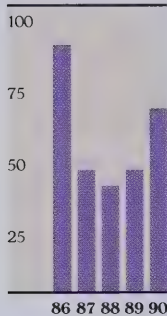
**Earnings**  
(Millions of Dollars)



*G&GL earnings more than doubled on both an operating and net basis (to \$202 million and \$120 million, respectively). The increases were mainly a result of higher gas liquids prices.*

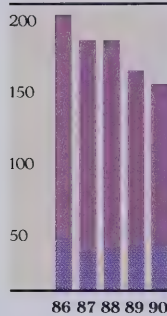
\*Operating profit basis; net income not available.

**Capital Expenditures**  
(Millions of Dollars)



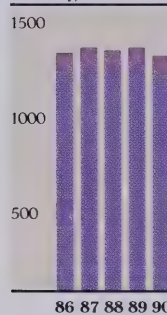
*Capital spending was up 49%, to \$64 million, as new gas supplies were connected, processing facilities upgraded and payments made on LNG tankers under construction.*

**U.S. Net NGL Plant Production**  
(Thousands of Barrels Daily)



*Gas liquids production—that is, the amount of gas liquids extracted at company gas plants—was down 5%. The decline was mainly due to the sale and consolidation of gas plants and low liquids prices in the first half of the year.*

**U.S. Natural Gas Sales**  
(Millions of Cubic Feet Daily)



*Sales of residue gas—gas remaining after the liquids are taken out—fell about 3%. An outgrowth of depressed natural gas prices, low rates of drilling for new gas have made it difficult to increase supplies available for sale. LNG sales, however, were slightly higher.*

*Gas & Gas Liquids (G&GL) is moving toward top performance by holding the line on costs and running operations more efficiently, according to senior vice president Ken Smalley: "We've achieved about \$30 million in savings in recent years by consolidating our gas plants and gas-gathering systems." This ongoing program, he points out, has resulted in a sizable reduction in the group's breakeven point. That fact, combined with long-awaited higher prices for gas liquids, led to a strong year in 1990.*

### Earnings Show Big Gain

G&GL net income rose to \$120 million in 1990, compared with \$50 million a year earlier. The increase was due primarily to a substantial increase in natural gas liquids prices, which rose strongly in the second half of the year. This factor was partly offset by higher natural gas purchase prices paid to producers and by slightly lower volumes.

### LNG Tankers Top Capital Project

Phillips plans to devote about 9 percent of its 1991 capital expenditure and investment budget, or \$129 million, to G&GL. Nearly half of the budget will go for payments on two new liquefied natural gas (LNG) tankers under construction. Capital spending in 1990 primarily went for connecting new gas supplies, upgrading and consolidating processing facilities and for initial payments on the LNG tankers.

### Extensive Facilities Keynote Strengths

G&GL competitive strengths include extensive natural gas gathering systems and efficient processing facilities located in prime gas-prone areas. Phillips also has a strong performance reputation, a fact that helps line up new gas supplies and sales. Another plus: The company continues to market a high portion of gas (more than 60 percent) to direct markets such as utilities and industrial users. This practice often brings premium prices.

Phillips also is recognized as a reliable, low-cost producer of LNG, having made deliveries to major Japanese utilities for more than 20 years from its facilities in Kenai, Alaska. "LNG sales are an important aspect of our business and a key reason Phillips is one of the nation's larger exporters," Smalley comments.

Moreover, G&GL is a linchpin of Phillips' integrated operations, providing gas liquids feedstocks for use in the production of company gasoline, chemicals and plastics.

### Expansion, Consolidation Projects Completed

During the year, G&GL completed a major expansion of its southeastern New Mexico gathering system and consolidated or sold certain marginal facilities.

The New Mexico project included construction of 105 miles of pipeline and over 125 meter stations. In addition, a Texas processing plant was purchased, and two gathering systems were acquired, in Texas and New Mexico. As part of an asset consolidation program that began in the mid-1980s, four Oklahoma facilities were shut down or sold during the year.

### Natural Gas Supplies Show Growth

G&GL increased its gas supplies in 1990, largely due to acquisitions of raw gas and the reevaluation of existing



supplies. At year-end, gross raw natural gas supplies available for processing through company-operated plants were estimated at 5.3 trillion cubic feet, compared with 4.9 trillion cubic feet in 1989. These supplies include about 532 million barrels (1990) and 496 million barrels (1989) of natural gas liquids, based on full ethane extraction.

Phillips gets its natural gas supplies through outside purchase contracts and processing agreements as well as from company exploration and production operations. Purchase agreements with outside producers accounted for about 80 percent of this supply in 1990.

#### **Strategies: Increase Volumes, Improve Efficiencies**

Because G&GL efficiency relies to a large extent on gas purchased from newly drilled wells, Phillips plans to continue seeking out new gas-supply sources. Says Smalley, "New gas supplies are our lifeblood and central to our profitability." He notes that most of G&GL's 1991 capital spending, excluding payments on the LNG tankers, will go for securing new gas supplies and improving service to producers.

Plans also call for projects to continue upgrading core gathering systems while consolidating less profitable ones, as well as securing more connections to major pipelines. In addition, G&GL is placing a high priority on continuing to sell at least 60 percent of its residue gas to direct markets.

#### **Mining Operations Well Under Way**

Top performance was in evidence as Phillips was involved in the opening of two additional coal mines in 1990—a lignite mine in Texas and a subbituminous coal mine in Wyoming. Gross production from Phillips' three jointly owned mines (50 percent interest) is expected to reach about 4.6 million tons in 1991, versus 1.9 million tons the previous year.



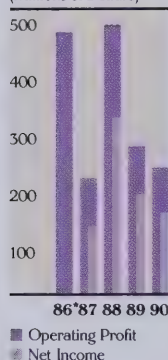
*At the heart of Phillips' integrated operations, gas plants like this one in Okarche, Okla., provided some 53 million barrels of gas liquids feedstocks in 1990 to company refineries and chemical plants. These feedstocks help make Phillips a low-cost producer of gasoline and petrochemicals.*



## Petroleum Products

# Profit Drifts Lower; Cleaner-Burning Fuels Make Debut

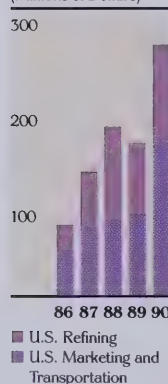
**Earnings**  
(Millions of Dollars)



Earnings declined to \$145 million on a net basis (\$220 million operating), primarily due to a fourth-quarter environmental charge. Otherwise, earnings were up slightly as higher sales prices for petroleum products offset higher feedstock costs.

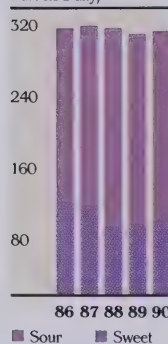
\*Operating profit basis; net income not available.

**Capital Expenditures**  
(Millions of Dollars)



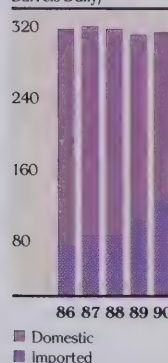
Capital spending rose 64%, to \$265 million, as a result of higher expenditures for pipeline and terminal upgrading, as well as for environmentally related projects at company refineries. Spending was the highest since 1982.

**Refinery Crude Oil Runs**  
(Thousands of Barrels Daily)



Less expensive sour crude continued to account for better than 70% of company crude oil runs in 1990. The ability to handle lower-cost crudes enhances Phillips' position as a low-cost refiner.

**Refinery Crude Oil Runs**  
(Thousands of Barrels Daily)



U.S.-produced crude oil accounted for about 64% of that processed by company refineries in 1990, compared with 71% the previous year. The biggest part of the imported supplies was shipped from Saudi Arabia to the Sweeny refinery.

1990 examples of top performance in Petroleum Products included the introduction of cleaner-burning, reformulated fuels and entry into retail propane markets. States executive vice president Bill Thompson: "Producing and selling cleaner-burning fuels will probably be the biggest challenge in this decade for our refining and marketing operations. In 1990, we took important early steps toward responding to these issues."

### Profit Steady After Adjustments

Net income for Petroleum Products fell 18 percent, to \$145 million, compared with \$176 million in 1989. However, adjusted for the organization's share of a 1990 environmental charge (\$50 million) and the 1989 California asset writedown (\$13 million), earnings would have been up about 3 percent. During the year, higher sales prices for petroleum products offset higher crude oil and gas liquids feedstock costs, higher operating costs and lower sales volumes.

### Capital Spending on Rise

About 19 percent of Phillips' 1991 capital expenditures and investment budget—\$288 million—will go to Petroleum Products. Largest outlays are planned for building company-operated, retail service stations, constructing an incinerator at the Sweeny refinery and continuing to upgrade the company's infrastructure of terminals and pipelines. The biggest program of 1990 was the continued construction of retail service stations.

### Diverse Feedstocks, Versatile Refineries Pace Strengths

Phillips has access to diverse sources of feedstocks for its refineries and other downstream operations. Of the crude oil processed by Phillips refineries in 1990, 189,000 barrels a day came from the United States. About half this amount was accounted for by the company's own domestic production.

Phillips refineries, moreover, consistently run near their rated capacity, a fact that holds down refining costs on a per unit basis.

Further, these refineries run a high share of less expensive, high-sulfur crude oil and generate a high percentage of products such as gasoline and petrochemicals at the upper end of the value range.

### Sales of Cleaner Fuels Under Way

As part of its effort to make available products that have less environmental impact, Phillips in 1990 began marketing cleaner-burning, reformulated gasolines in the St. Louis and Denver areas. Sales reached as high as 20 percent of Phillips' total sales in the Denver area and at year-end were running about 10 percent in St. Louis. Phillips' reformulated fuels contain more oxygen-rich components than traditional grades and hence burn more cleanly.

The company began marketing propane as a fleet-vehicle fuel in the Denver area in 1990 by purchasing a local liquefied petroleum gas (LPG) distributor and expanding its operations. In addition to serving residential and commercial accounts, the business also markets UltraClean LPG—clean-burning propane—for use by buses and other fleet vehicles. Late in the year, the company also entered the retail propane market in St. Louis. According to senior vice president Charlie Bowerman,



Phillips believes propane has strong growth potential as a vehicle fuel, given today's environmental concerns. "Fleet propane is probably the best fuel available to combat emissions problems in certain areas," says Bowerman. He adds that the company is studying expanding retail propane operations to other parts of the country.

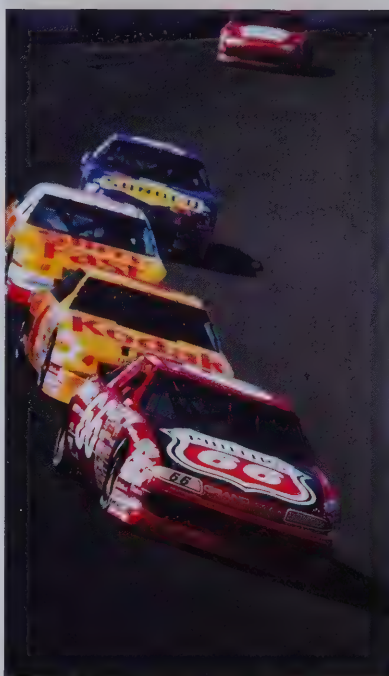
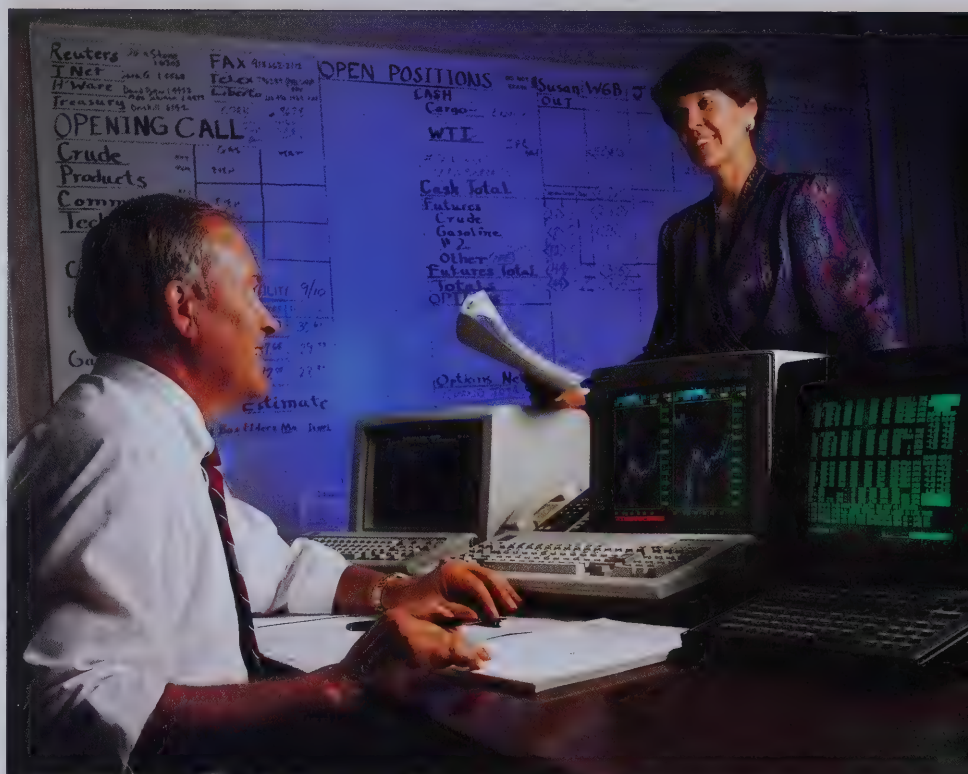
### Infrastructure Being Modernized

Phillips continued upgrading its pipeline and terminal infrastructure in 1990 by completing one major pipeline project, starting another and beginning a modernization program at a major products terminal. A products pipeline linking Amarillo and Albuquerque was expanded, making possible higher-volume shipments of gasoline. A major project got under way to replace a pipeline providing gas liquids feedstocks to the Sweeny refinery. Also, a renovation of the Kansas City products terminal was begun during the year.

### Product Sales Turn Down; Brand Image Program Going Strong

Company gasoline sales were down slightly for the year, as Phillips ceased marketing operations in Florida and essentially phased out leaded fuel. Also contributing to the decline was a continuing consolidation of smaller outlets. Bowerman explains that escalating costs are putting pressure on smaller stations across the industry: "Costs of liability insurance and replacing underground storage tanks are making many small operations uneconomical. Thus we are seeing a continued movement toward larger-volume, higher-quality outlets." Partly as a result, Phillips' per-station sales volumes increased 5 percent in 1990.

Meanwhile, Phillips continued to strengthen its brand image by building or buying 39 company-operated, retail stations, mainly in high-traffic, urban areas. (Twenty retail units were sold or shut down during the year, most of them related to the company's pullout from Florida.) In addition, 1,086 more Phillips 66 stations owned by independent marketers were upgraded to meet the

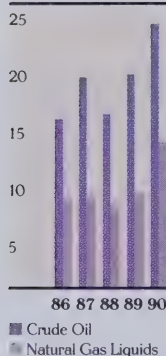


Crude oil traders Bill Billings and Linda Davidson keep close watch on oil prices, as part of the company's futures trading operation. Phillips engages in trading both to "hedge" or protect against future price changes and to gain insights about oil-market trends.

Left, Cale Yarborough Motorsports and Phillips teamed up to participate in some 30 NASCAR events during the year. The Phillips 66 TropArtic car helped raise the visibility of the company's motor oil and other products.

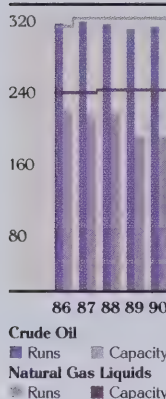


### Average Cost Of Refinery Feedstocks (Dollars per Barrel)



Costs paid by Phillips refineries for feedstocks rose strongly during the year. Company refineries process about 75,000 barrels a day of crude oil more than Phillips operations produce. This results in considerable outside purchases.

### Crude Oil and NGL Capacity And Runs (Thousands of Barrels Daily)



The volume of crude oil processed by company refineries increased about 1%, to 297,000 barrels a day. NGL runs were slightly higher than in 1989. Operating refineries near capacity helps Phillips keep down per-unit processing costs.

### Refinery Crude Oil and Natural Gas Liquids Capacities and Runs—Thousands of Barrels Daily

	Crude Oil		Natural Gas Liquids	
	Capacity	Runs	Capacity	Processed
<b>1990</b>				
Sweeny, Texas	175	170	90	75
Borger, Texas	105	105	95	80
Woods Cross, Utah	25	22	—	—
Conway, Kansas	—	—	42	18
	305	297	227	173
<b>1989</b>				
Sweeny, Texas	175	167	90	77
Borger, Texas	105	104	95	76
Woods Cross, Utah	25	22	—	—
Conway, Kansas	—	—	42	19
	305	293	227	172

### Major Products Produced Per Barrel of Crude Runs

	1990	1989
Automotive gasoline	61%	60
Aviation fuels	12	12
Distillates	27	28
Residual products	2	2

Phillips blends natural gas liquids into automotive gasoline, resulting in one of the industry's highest percentages of gasoline produced per barrel of crude oil runs.

company's exacting image and appearance standards. At year-end, the company had 1,145 independent marketers and 279 company-retail outlets.

### Refineries Running Near Capacity, Adapting to Environmental Standards

Phillips refineries ran at 97 percent of their rated capacity during the year, compared with an industry average of 87 percent. Both crude oil and gas liquids runs were slightly higher.

Faced with ever-tighter standards on automobile emissions, including those contained in the 1990 Clean Air Act, Phillips continued studying various investments for its refineries. These included possible additions to methyl tertiary-butyl ether (MTBE) capacity and projects to produce cleaner-burning, low-sulfur diesel fuel. MTBE helps reduce emissions by increasing the oxygen content of gasoline.

Another project, to reduce waste volume, is a hazardous waste incinerator at the Sweeny refinery. Construction of the proposed facility could get under way in 1991, as soon as a construction permit is received.

### Strategies:

#### Expand Company-Retail Marketing

Adding company-operated, retail service stations is pivotal to the downstream organization's objective of being a top performer, says executive vice president Bill Thompson: "We don't see gasoline sales showing much growth in the future, so our job will be to maximize profit from every gallon we do sell," through an expanding network of retail stations and a continuing reliance on high-performing outlets owned by independent marketers. Company-retail outlets accounted for less than 3 percent of Phillips 66 stations in 1990 yet generated 15 percent of total gasoline sales. Volumes sold through company-operated stations have more than tripled since 1984. Based on the success of this program, Phillips plans to continue building two dozen or so new retail units a year.

### Maintain Strong Relations With Independent Marketers

Even as the company develops its own retail operations, it is working hard to keep strong ties with the independent marketers who sell an overwhelming share of Phillips gasoline. Remarks Bowerman, "We have always regarded independent marketers as the backbone of our marketing effort and will continue working to help them keep pace with the changes taking place in the industry."

In addition to existing programs designed to provide assistance to marketers to renovate their stations, Phillips in 1990 formed an advisory group made up of marketers who meet with management to discuss issues and company programs.

### Satisfy Environmental Standards

In light of new and anticipated environmental standards, Phillips is planning to spend several hundred million dollars over the next few years upgrading its refineries. Possible investments are related to the production of low-sulfur diesel fuel and cleaner-burning gasolines. Despite these costs, Phillips feels it is well-positioned to meet more exacting environmental requirements at a reasonable cost. Notes Thompson, "Our approach is not just to satisfy the new rules by throwing money at them, but to meet them in a way that might give us a competitive edge."

### Continue Upgrading Infrastructure

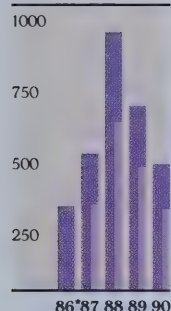
The company plans to continue upgrading its distribution arteries of product terminals and pipelines. These projects enhance efficiency by keeping distribution costs in check and, in some cases, enable the company to direct more petroleum products to growing markets. Nine product terminals and two pipelines are scheduled to begin or continue with renovation during 1991.



## Chemicals

# Earnings Show Decline; Plastics Plant Restoration in Progress

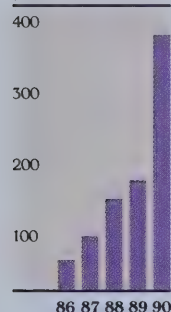
**Earnings**  
(Millions of Dollars)



Earnings declined 34%, to \$291 million, mainly due to lower margins for olefins. 1990 results included income from business interruption insurance associated with the 1989 plant accident. Operating profit was \$448 million, also sharply lower.

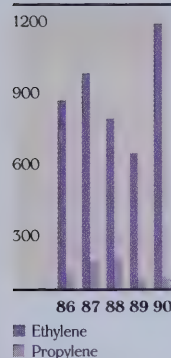
\*Operating profit basis; net income not available.

**Capital Expenditures**  
(Millions of Dollars)



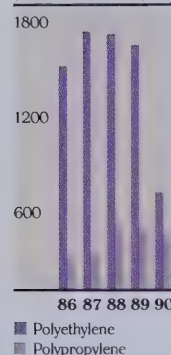
Capital spending for chemicals projects surged 130%, to \$359 million, the highest ever. Most of the increase went for restoring polyethylene capacity.

**Ethylene and Propylene Outside Sales**  
(Millions of Pounds)



Ethylene sales to customers outside the company almost doubled. Reason: Volumes usually sold within the company for polyethylene production were directed to outside customers.

**Polyethylene and Polypropylene Outside Sales**  
(Millions of Pounds)



Outside polyethylene sales were off 61%, because of a lack of Phillips' U.S. production capacity. Sales were made through imports from the company's Singapore facilities and through various purchases. Outside polypropylene sales declined 16%.

In the case of Phillips' chemicals business, top performance in 1990 was best expressed by the continued rebuilding of polyethylene capacity at the Houston Chemical Complex, by progress on construction of a new, world-scale ethylene unit at Sweeny, Texas, and by the record financial performance of specialty chemicals. Additionally, progress was made toward developing and commercializing several new products.

### Earnings Off Sharply

Chemicals net income fell 34 percent, to \$291 million, versus \$439 million in 1989. The reduction occurred as industry olefin capacity utilization declined, putting pressure on margins. Business interruption insurance proceeds helped offset the impact of lower sales revenues arising from a 1989 explosion and fire at the company's U.S. polyethylene facilities.

### Capital Spending Stressing Expansions

Phillips plans to direct 23 percent of its 1991 capital expenditure and investment budget, or \$342 million, to chemicals operations. Major expenditures will go to complete the ethylene plant at Sweeny, upgrade the Houston Chemical Complex (HCC) infrastructure and modernize company fibers operations. Another major effort will be continued rebuilding of polyethylene capacity. Largest expenditures in 1990 were for the ethylene and polyethylene projects.

### NGL Feedstocks, Technology Pace Strengths

Thanks to Phillips' position as the nation's largest producer of natural gas liquids, the company has wide access to relatively low-cost feedstocks, which are upgraded into chemicals and plastics. Also, the company's well-integrated structure—with businesses ranging from feedstocks to plastic pipe and fibers—helps ensure markets for certain

products. A large share of Phillips olefins, for example, is typically used in plastics manufactured by the company.

Chemicals is backed by a strong research and development team that works to develop new products and improve existing ones. Recent efforts have led to new polypropylene materials for disposable diapers and for automobile interiors. The company is considering the commercial introduction of a promising specialty plastic (polymethylpentene) and its primary component (4-methylpentene-1).

### Polyethylene Unit Starting Up

During the year, Phillips made considerable progress rebuilding its U.S. polyethylene business destroyed by a 1989 explosion and fire at HCC. In early 1991, the first 600-million-pound-a-year stage of new production was in the start-up process, and further capacity additions of 600 million pounds are scheduled in mid-1991 and mid-1992. Capacity rebuilding is being paid for by property insurance, while business interruption coverage is helping make up lost earnings caused by the accident.

With rebuilding well in hand, the next objective will be attracting new customers, says plastics vice president John VanBuskirk: "In doing so, we've got several advantages. Among other things, our new facilities will make us even more efficient and cost-effective."





*A material well-suited for bowls and microwaveware, Phillips' specialty plastic Crystalor polymethylpentene is finding a home in many kitchens. The heat-resistant plastic is being produced in small quantities at a Bartlesville pilot plant to assess its market potential.*

*Right, a workman applies finishing touches to a portion of polyethylene capacity being rebuilt at the Houston Chemical Complex. The first stage of new capacity will replace about 40 percent of that lost in a 1989 accident.*





## Ethylene Plant Nearing Completion

Construction of a new 1.5-billion-pound-a-year ethylene plant at the company's Sweeny complex was about 70 percent complete at year-end and is expected to begin operation in late 1991. The facility is owned by a partnership in which Phillips has a 50 percent interest and is the company's largest downstream venture in recent years. Chemicals general manager Guy Sutherland says the new plant will "ensure our position as a leading player" in ethylene markets and strengthen the company's role as a low-cost producer.

## Chemicals Results Mixed

■ *Olefins/Aromatics.* Ethylene sales volumes were down because of cutbacks associated with the HCC accident. Phillips is one of the industry's largest producers of olefins such as ethylene, a raw material for many chemicals and plastics. In aromatics, sales volumes nearly equaled 1989's record levels for cyclohexane but were lower for paraxylene. Phillips is the nation's leading supplier of cyclohexane, a feedstock for nylon.

■ *Specialties.* Profits and sales volumes were generally higher for this area, which includes mining and oilfield chemicals, catalysts and specialty chemicals. Specialty chemicals had record profit for the third year in a row.

## Plastics Sales Generally Lower

■ *Polyethylene/Polypropylene.* U.S. volumes of high-density polyethylene declined dramatically, while sales from the company's Singapore plant showed a small gain. In light of the 1989 Houston accident, Phillips produced no polyethylene in the United States but did supply some resin through imports from Singapore and various outside purchases. Polypropylene sales volumes fell, largely due to an extended period of downtime for maintenance.

Margins improved for polyethylene but contracted for polypropylene, as sales prices fell to a greater extent than propylene feedstock cost.

■ *K-Resin/Ryton.* Sales volumes of K-Resin copolymer were up slightly. A 50 percent capacity expansion at Houston was brought into operation late in the year. Sales volumes of Ryton engineering plastics were down slightly.

■ *Fibers/Pipe.* Phillips Fibers Corporation, a manufacturer of polypropylene fibers for use in carpeting and furnishings, had higher sales volumes and experienced its best year since 1987. Margins improved as a result of lower raw material (chiefly polypropylene) costs. According to executive vice president Bill Thompson, Phillips is planning substantial investments in this area in order to upgrade facilities and bring out new products. "We see fibers playing a major role in our plans to put more emphasis on specialty-type businesses," he says.

Sales volumes were about the same as the previous year for Phillips Driscopipe, Inc., which manufactures polyethylene pipe mainly for utility and industrial uses. During the year, the subsidiary introduced a new product—Permacore profile pipe—for the large-diameter market dominated by concrete.

## Strategies:

### Seeking More Balance

Phillips is planning an increasing emphasis on specialty-type products, which often have higher margins and are less sensitive to economic downturns. According to Thompson, the objective is to more than double specialty-type products' business by the turn of the century, while continuing to support commodity businesses. Recent examples of this emerging higher profile include expansions in K-Resin copolymer and polypropylene fibers, construction of a new isobutylbenzene (feedstock for ibuprofen) facility at Borger and a sulfur chemicals expansion in Belgium.

At the same time, Phillips is increasing capacity for commodity products such as polyethylene and ethylene, in which the company has a low-cost position.

## Developing Products

Strides were made during the year to commercialize several new products. Perhaps foremost among these is Crystalor polymethylpentene, a specialty plastic widely regarded as having strong potential, now being produced in limited quantities at a company pilot plant. The company is considering building facilities to produce polymethylpentene on a commercial scale. Also of high potential, Alpha polyolefin fiber debuted in floor mats of certain 1991 automotive products and is being evaluated for use in athletic wear.

Other products introduced during the year included those to control soil erosion and to serve as coverings between layers of debris in landfills.

## Staking Out Markets

Phillips believes in the importance of cultivating overseas markets and is giving serious consideration to locating new facilities abroad. As one example, a study is expected to get under way in 1991 regarding the possible building of a new K-Resin facility in Europe or Asia.

During the year, Phillips strengthened its position to produce custom-resin blends by expanding plastics compounding capabilities in Singapore. Also, the Tessenderlo, Belgium, sulfur chemicals plant was granted a key operating permit as a result of its responsive environmental record. The permit cleared the way for an expansion of sulfur chemicals operations in Europe.

Operating Revenues	Millions of Dollars				
	1990	1989	1988	1987	1986
Petrochemicals	\$1,250	1,107	1,034	836	748
Plastic resins	522	1,004	1,155	783	622
Synthetic fibers	187	171	163	158	146
Plastic pipe	115	128	130	101	87
Other sales and services	46	39	36	50	28
Sold operations	—	—	—	—	67
	\$2,120	2,449	2,518	1,928	1,698

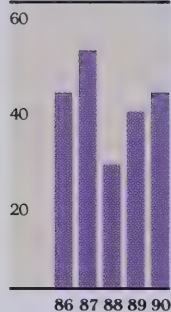


## Technology

# R&D Effort Keying On Cleaner Fuels, Other Environmental Issues

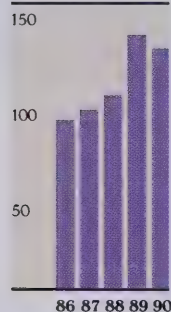
*To position Phillips as the top performer in the 1990s, research, development and engineering efforts will focus on the following, says senior vice president Dave Tippeconnic: Providing technology to help Phillips meet or exceed environmental requirements, striving for continuous improvement in company products and processes, making sure research corresponds to customer needs and business strategies, and managing technology with an eye toward achieving maximum financial returns. Notes Tippeconnic, "In the interests of top performance, we're working hard to increase our commercial success rate and do so in less time than we have historically."*

**Licensing Revenues**  
(Millions of Dollars)



*Revenues from the licensing of Phillips technology rose 11%, to \$41 million. Most company licensing revenues come from plastics products and processes.*

**Research and Development Expenses**  
(Millions of Dollars)



*R&D expense — mainly everyday costs of the company's research and technology operations — declined 5%, to \$127 million, versus \$133 million in 1989.*

### Programs Emphasizing Environment

In keeping with efforts to reduce the environmental impact of company products and processes, Phillips research programs continued to focus on developing cleaner-burning reformulated gasolines, reducing the sulfur and aromatics content of diesel fuels, decreasing emissions from production facilities, and recycling plastics and catalysts.

During the year, Phillips provided reformulated gasolines as the exclusive supplier for a joint auto/oil industry group studying the effects of gasoline make-up on air emissions. The fuels are primarily produced at the company's Borger facilities, a longtime source of high-purity reference fuels.

Additionally, Phillips researchers worked with the company's downstream organization in modifying refineries for the production of low-sulfur diesel fuel. Government standards require as much as an 80 percent reduction in transportation diesel-fuel sulfur content by 1993.

### Efforts to Upgrade Olefins in Progress

Phillips researchers in 1990 continued efforts to upgrade commodity-type chemicals into substances of higher value. Foremost among these is a

process for converting propylene into the specialty olefin used in the manufacture of polymethylpentene. Similarly, processes are being developed to convert ethylene, another commodity olefin, into a higher-value product such as hexene.

During the year, R&D also helped develop materials to improve the efficiency of company ethylene units by inhibiting carbon fouling.

### Further Strides Made in Plastics

Company researchers continued working on technology that will permit the production of lower-density polyethylene resins in facilities designed to manufacture high-density polyethylene. The goal of such efforts is to help Phillips produce lower-density film resins and other products being offered by competing companies.

In addition, a new resin was developed during the year that, when blended with recycled polyethylene milk bottles, yields a product suitable for packaging oil, chemicals and detergents. Such developments illustrate Phillips' belief that plastics can be produced, and recycled, without undue environmental problems.

Company research efforts also are being carried out with an eye toward the consumer market. Recent projects in this



regard have led to an improved type of K-Resin copolymer for food packaging and glass-fortified polymethylpentene compounds for use in automotive and electrical components. Two new materials—super-absorbent polymers, for diapers among its uses, and advanced ceramic powders—were tested during the year to determine their commercial potential.

### **Licensing Efforts Strong**

An industry leader in technology licensing, Phillips has traditionally had success converting its strong research program into additional income. Although the bulk of licensing revenues comes from plastics—a Phillips technology stronghold—the company is also offering its know-how concerning clean-burning octane enhancers and oxygenate additives. In this respect, a Phillips process, Steam Active Reforming (STAR), has been selected by several companies to help produce gasoline components.

Final aspects of a long-running dispute involving patents for crystalline polypropylene were settled in Phillips' favor during the year. The dispute began with Phillips' discovery of crystalline polypropylene in 1951 and the subsequent issuance of a U.S. patent. The patent will remain in force through the end of the century, allowing the company to continue realizing substantial licensing revenues.

### **Patent Leadership Extended**

Phillips received 136 U.S. and 397 foreign patents in 1990. At the end of the year, the company held 4,026 active U.S. patents, among the most of any oil company. At year-end, the company's patented products and processes were used in 30 countries.

### **Provesta Posts Higher Sales**

Phillips' Provesta Corporation posted strongly higher sales for a second straight year. Provesta produces yeast-based flavor enhancers for human food applications, nutritional food bars and animal feed ingredients. During the year, Provesta formed a joint venture with a Norwegian firm to produce feed products for commercial fish farming.



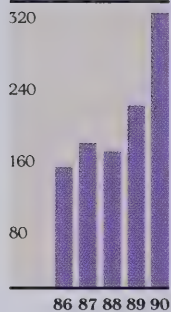
*Bill Denton, an employee of a joint venture involving Phillips' Provesta subsidiary, checks a pheromone clip being used in a California orchard. Pheromones being developed by company researchers help curb insect populations by emitting a scent that alters reproductive patterns. The pheromones are being sold by the joint-venture company AgriSense.*



# Environmental Efforts Advance; Total Quality Process in High Gear

*To Phillips, top performance goes beyond dollars and cents; it includes being a good citizen, caring neighbor and sensitive employer. Responsible citizenship extends to safeguarding the environment and working for programs to encourage oil and gas exploration in stable parts of the world. As an employer, Phillips is a leader in participative management—the process of getting employees involved in decisions affecting their jobs. That, plus an emphasis on continuous improvement, is the hallmark of the new total quality performance process being implemented.*

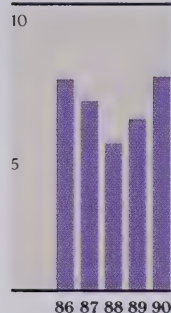
**Environmental Expenditures\***  
(Millions of Dollars)



\*Capital and expensed.

Expenditures were up 52%, to \$308 million. Of this, \$120 million was in the form of capital spending for new projects, while \$109 million was spent on existing environmental control systems. A further \$79 million was charged for projects expected to begin as early as 1991.

**Charitable Contributions**  
(Millions of Dollars)



Contributions were up about 25%, to \$7.5 million, as the company continued its support of education and youth. Some \$4.7 million went to education, benefiting approximately 500 colleges and universities.

## Environmental Initiatives Move Ahead

An increased emphasis on reducing emissions and improving products is leading to substantial new investments and different ways of operating. The following actions, in progress in 1990, are representative of Phillips initiatives in this area and related ones:

■ The company remained in the forefront of the reformulated fuels issue by continuing its role in an auto/oil industry research group evaluating the effects of new gasoline formulations on air emissions. Phillips was chosen as the blender and tester of reformulated and oxygenated fuels for the study. Also, Phillips began selling cleaner-burning reformulated gasoline, as well as propane as a fleet-vehicle fuel, in certain markets. (See Petroleum Products section.)

■ In a vote of confidence for recycling, Phillips formed a joint-venture company that plans to build a plastics recycling facility. The plant will handle discarded high-density polyethylene articles. In addition, Phillips contributed some 12,000 recycling bins to a pilot recycling program in Houston. The bins, themselves made of recycled plastics, are set at curbside for pick up after being filled with recyclable waste such as plastic and glass. On a related note, the first phase of an office waste-paper

recycling project in Bartlesville had a 97 percent participation rate after being started late in the year.

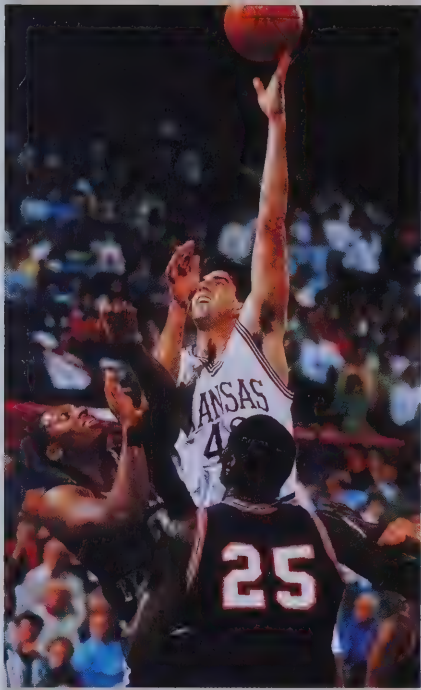
■ The company's Spartanburg, South Carolina, fibers plant eliminated all polychlorinated biphenyls, or PCBs, from the site. PCBs are a potentially toxic substance commonly found in old electric transformers. Across the company, Phillips has been in touch with some 200 electric utilities, asking them to inspect and remove PCB-contaminated electrical equipment from areas within or near company grounds.

■ During the year, Phillips adopted a 12-point set of goals promoting continuous improvement in environmental, health and safety practices. Examples include ways to save energy, communicate with neighbors, operate within the highest standards of safety, minimize waste generation and handle hazardous materials in the most responsible manner possible. Company facilities in 1991 will be mapping out strategies to support these "Principles of Performance."

## Total Quality Performance Process Up and Running

In another example of Phillips' determination to be the industry's top performer, the company's total quality effort hit full stride during the year.





*Above, a longtime supporter of education, Phillips honors top student athletes through its Classroom Champions and Academic All-Big 8 programs. Included are monetary awards to the schools and recognition on company-sponsored Big 8 basketball telecasts.*

*With help from a Phillips grant, Canada geese and other waterfowl will enjoy many more happy landings (and takeoffs) from small lakes, or playas, like this one near Dimmitt, Texas.*





Wiens of Bartlesville, Pål Ketil Karlsen of Stavanger, Norway, and Jose Valentin of the company's Puerto Rico Core facility —each received the maximum award of \$50,000. Their suggestions are expected to net first-year savings of \$2.4 million. Wiens also received a \$50,000 award in 1989.

■ As part of a performance award program designed to salute outstanding efforts on the job, 19,830 shares of common stock were distributed to 171 employees.

#### **Safety Record Back on Track**

Phillips' safety record—a critical measure of performance—resumed a pattern of improvement after suffering a serious setback in 1989. The rate of recordable injuries fell to its lowest point ever in 1990, even though two on-the-job fatalities did occur. The company's total injury rate for the year was 67 percent better than the level of ten years earlier.

The Spartanburg fibers plant—current holder of the company safety record—was nearing 11 million hours at year-end without a lost-time accident.

#### **Work Force Up Slightly**

Phillips' work force increased by 654 employees during 1990, ending the year at 22,411. Most of the increase took place in downstream operations, much of it to staff new company-retail service stations. Of the 200 new employees recruited directly from college campuses, better than 40 percent were minorities or females.

#### **Record Wildlife Contribution Made**

As an expression of concern for the natural habitat of wildlife, Phillips provided money and other resources to help preserve or restore several thousand playas in a five-state region. Playas are small lakes used as stopovers by ducks and geese during their seasonal migrations. In recent years, many of these playas have been depleted or threatened by development and dry weather. The company's financial commitment—\$625,000 over five years—is the largest cash contribution ever made by Phillips for a conservation project.

#### **Support for Swimming/Diving Continues**

Phillips continued as national sponsor of United States Swimming and United States Diving. These organizations sponsor competitions that help prepare U.S. athletes for the Olympics. The company has been national sponsor since the 1970s.

#### **Employee Ownership Expanded**

During the year, some 14 million shares of stock were added to the company's Long-Term Stock Savings Plan, bringing the amount of stock held by employee benefit plans to about 24 percent of total shares outstanding. The program was created in 1988 with an initial 14 million shares. The additional shares were purchased under an extension that provides for employee allocations to continue for up to seven additional years (through 2005).

#### **Phillips Helps Shape Public Policy**

Top performance, Phillips believes, is enhanced by policies urging the responsible development of energy resources. Thus the company continued working with state, local, national and international governments for the development of public policies in this regard. Phillips supports free-market energy policies and has provided input to the U.S. government for a national energy strategy.

The company also has been active on the environmental front, supporting the enactment of regulation that provides for clean air and water in a manner that's cost-effective for industry and consumers. Further, Phillips is a leading international advocate of sustainable development—the concept that today's economic growth can take place without undermining tomorrow's quality of life.

■ Among other developments, several thousand employees attended company-sponsored quality awareness classes and quality action teams were formed throughout the company. These employee teams address specific quality problems or opportunities for improvement, usually ones that cut across organizational boundaries.

■ Also during the year, Phillips management declared that each part of the company should be in position to contend for the Malcolm Baldrige National Quality Award by no later than the year 2000. Starting in 1991, Phillips' quality staff will apply Baldrige-type standards in annual quality-improvement reviews involving each group and staff. The criteria call for each part of the company to be the top performer in meeting or exceeding the needs of customers, employees, shareholders and the community.

#### **PAT Savings Reach Record**

Phillips' total quality effort is tied to the company's longtime support of participative management—programs that encourage employees to help make decisions affecting their jobs.

■ As an example, Phillips' 220 participative action teams achieved record savings of \$33.2 million for the year, compared with \$15.5 million in 1989. These teams meet voluntarily to solve work-related problems and encourage innovation.

■ The company's suggestion plan showed first-year tangible savings of \$12 million, versus about \$11 million the previous year. Employees received a total of \$784,000 for their suggestions. Three employees—Arlen



# Financial Review 1990

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## Oil and Gas Operations

In accordance with Financial Accounting Standards Board (FASB) Statement No. 69, "Disclosures about Oil and Gas Producing Activities," and regulations of the Securities and Exchange Commission (SEC), the company is making certain disclosures about its oil and gas exploration and production operations. While this information was developed with reasonable care and disclosed in good faith, it is emphasized that some of the data are necessarily imprecise and represent only approximate amounts because of the subjective judgments involved in developing such information. Accordingly, this information may not necessarily represent the present financial condition of the company or its expected future results.



# MANAGEMENT'S DISCUSSION AND ANALYSIS

February 13, 1991

PHILLIPS PETROLEUM COMPANY

*Management's Discussion and Analysis is the company's analysis of its financial performance and of significant trends which may impact future performance. It should be read in conjunction with the financial statements and notes, supplemental oil and gas disclosures, and five-year financial and operating reviews.*

## SIGNIFICANT EVENTS

- Consolidated net income for 1990 was \$779 million, compared with \$219 and \$650 million for 1989 and 1988, respectively. Total revenues for 1990 were \$14 billion, compared with \$12.5 billion for 1989 and \$11.5 billion for 1988.
- The company recorded an extraordinary gain of \$101 million (\$.40 per share) due to the settlement of litigation with the Government of Iran over the expropriation of assets in 1979.
- Effective January 1, 1990, the company adopted FASB Statement No. 96, "Accounting for Income Taxes." The effect of the change was to increase net income for the year by \$267 million (\$1.07 per share), including an increase of \$137 million (\$.55 per share) for the cumulative effect on years prior to 1990.
- During 1990, the Occupational Safety and Health Administration (OSHA), issued two citations to the company's wholly owned subsidiary, Phillips 66 Company, and proposed fines totaling \$5.66 million in relation to the explosion and fire at the Houston Chemical Complex (HCC) in October 1989. On May 9, 1990, Phillips 66 Company filed formal notice with OSHA that it will contest all of the alleged violations and the method OSHA used in arriving at the number of alleged violations.
- The Long-Term Stock Savings Plan of Phillips Petroleum Company borrowed \$400 million, guaranteed by the company, and purchased 14,159,292 shares of authorized, but unissued, common stock from the company at \$28.25 per share.
- In its first public offering since 1983, the company sold \$300 million of 9½% notes due in 1997. With the proceeds of these notes and the funds generated by the sale of stock to the LTSSP, the company repurchased approximately \$350 million of its high-coupon debt, with the remainder used to reduce the balance of revolving lines of credit.
- During the year, the company's worldwide sales price of crude oil increased 29 percent while natural gas sales prices increased 12 percent, compared with 1989 average prices. Also, during the year U.S. prices for unfractionated natural gas liquids increased 51 percent. Prices rose principally as a result of the situation in the Middle East.

## Summary of Net Income

Years Ended December 31

Millions of Dollars

	1990	1989	1988
<b>Petroleum</b>			
Exploration and Production			
United States	\$ 187	(91)	45
Outside United States	363	193	190
	550	102	235
Gas and Gas Liquids*	120	50	9
Petroleum Products*	145	176	312
	815	328	556
<b>Chemicals</b>	291	439	595
<b>Corporate and Other</b>	(565)	(548)	(501)
Income before Extraordinary Item and Cumulative Effect of Change in Accounting Principle	541	219	650
Extraordinary Gain	101	—	—
Cumulative Effect of Change in Accounting for Income Taxes	137	—	—
<b>Net Income</b>	<b>\$ 779</b>	<b>219</b>	<b>650</b>

\*Effective January 1, 1989, the method for calculating the transfer price for unfractionated natural gas liquids sold to Petroleum Products by Gas and Gas Liquids was revised. If the revision had been in effect for 1988, net income for Gas and Gas Liquids would have increased and Petroleum Products' net income would have decreased an estimated \$39 million.

## RESULTS OF OPERATIONS

Net income for 1990 was \$779 million, compared with \$219 million in 1989 and \$650 million in 1988. Earnings in 1990 benefited from a \$101 million extraordinary gain from settlement of litigation with Iran over the 1979 expropriation of assets, as well as from adoption of FASB Statement No. 96, "Accounting for Income Taxes." The cumulative effect for years prior to January 1, 1990, was \$137 million. In addition to the cumulative effect, adoption of the new pronouncement also increased 1990 earnings by \$130 million over what would have been reported under the company's previous method of accounting for income taxes. Higher worldwide crude oil, natural gas and natural gas liquids sales prices also contributed to the increase in earnings for 1990. These favorable factors were partly offset by a \$90 million after-tax loss on the sale of Offshore Insurance Management Co., parent of Walton Insurance Limited; a \$57 million after-tax environmental charge; and lower results from downstream operations. Earnings in 1989 included a \$280 million after-tax writedown of the company's offshore California investments and were adversely affected by the October 1989 accident at the company's Houston Chemical Complex which halted all U.S. polyethylene production. Net income for 1990 included \$229 million from business interruption insurance related to that accident.

The following table shows the change in 1990 average sales prices compared with 1989 prices.



	1990	1989	Change
<b>Exploration and Production</b>			
Crude Oil (per barrel)			
United States	<b>\$20.78</b>	16.60	25%
Outside United States	<b>23.37</b>	17.72	32
Worldwide	<b>22.28</b>	17.21	29
Natural Gas—Lease (per thousand cubic feet)			
United States	<b>1.68</b>	1.59	6
Outside United States	<b>2.77</b>	2.30	20
Worldwide	<b>2.06</b>	1.84	12
<b>Gas and Gas Liquids</b>			
U.S. Residue Gas (per thousand cubic feet)	<b>1.74</b>	1.71	2
U.S. Natural Gas Liquids (per barrel—unfractionated)	<b>12.53</b>	8.32	51
<b>Petroleum Products</b>			
U.S. Natural Gas Liquids (per barrel—fractionated)	<b>15.08</b>	10.54	43
Automotive Gasoline (per gallon)	<b>.76</b>	.63	21
Distillates (per gallon)	<b>.70</b>	.57	23
Liquefied Petroleum Gas (per gallon)	<b>.39</b>	.27	44

The company's 1990 worldwide crude oil production remained level with 1989. Natural gas production increased 4 percent while natural gas liquids declined 6 percent. Natural gas production was up as a result of production commencing from a number of U.S. fields, including the South Timbalier area in the Gulf of Mexico and a coal-seam gas project in the San Juan Basin of northwestern New Mexico. The decline in natural gas liquids production was primarily due to the sale and consolidation of gas liquids extraction plants.

### Exploration and Production

Earnings increased to \$550 million in 1990, compared with \$102 million in 1989 and \$235 million in 1988.

Domestic operations reported earnings of \$187 million in 1990 versus a \$91 million loss in 1989 and income of \$45 million in 1988. The improvement for 1990 was primarily due to higher crude oil sales prices and higher natural gas sales prices and volumes. These factors were partly offset by lower crude oil sales volumes and by higher lifting costs and production expenses. The loss for 1989 included \$220 million related to the writedown of offshore California investments.

Earnings outside the United States were \$363 million in 1990, compared with \$193 and \$190 million in 1989 and 1988, respectively. Higher prices and sales volumes for crude oil and natural gas were primarily responsible for the increase in earnings in 1990, partly offset by higher exploration expenses.

### Gas and Gas Liquids

Gas and Gas Liquids earnings rose to \$120 million in 1990, compared with \$50 and \$9 million in 1989 and 1988, respectively. The increase in 1990 was due primarily to a substantial increase in natural gas liquids sales prices, as well as higher prices for liquefied natural gas and residue gas. These improvements were partly offset by higher natural gas purchase prices and lower volumes.

### Petroleum Products

In 1990, earnings were \$145 million, versus \$176 million in 1989 and \$312 million in 1988. A \$50 million environmental charge was primarily responsible for the decrease in 1990. The impact of higher sales prices during 1990 was generally offset by lower sales volumes and higher feedstock and operating costs. Earnings for 1989 included \$13 million related to the writedown of offshore California investments.

### Chemicals

Earnings were \$291 million in 1990, compared with \$439 and \$595 million in 1989 and 1988, respectively. The 1990 decrease in earnings was primarily due to lower margins and sales volumes, particularly for olefins. This decrease was mitigated somewhat by business interruption insurance. Earnings in 1990 also included a \$7 million environmental charge.

### Corporate and Other

Corporate and Other reported a loss of \$565 million in 1990, compared with losses of \$548 million in 1989 and \$501 million in 1988. The loss from the sale of Offshore Insurance Management Co., the parent of Walton Insurance Limited, and a loss on debt retirement were primarily responsible for the increase in the loss for 1990. These losses were partly offset by lower interest expense. In addition, 1989 included \$47 million for the writedown of capitalized interest associated with the offshore California investments.

### Provision for Income Taxes

Effective January 1, 1990, the company adopted FASB Statement No. 96, "Accounting for Income Taxes." The effect of the change was to increase income before extraordinary item and cumulative effect of a change in accounting principle by \$130 million (\$.52 per share) for the year. In addition, the cumulative effect of the change on prior years increased net income by \$137 million (\$.55 per share).

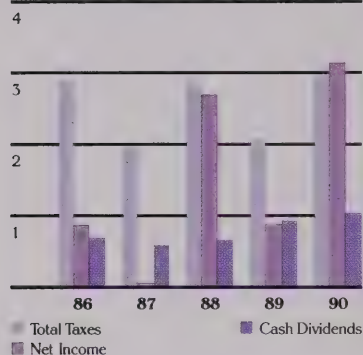
The provision for income taxes was \$646 million in 1990, compared with \$317 and \$465 million in 1989 and 1988, respectively. The increase in 1990 was due primarily to higher pretax earnings, partly offset by the effect of adopting Statement No. 96. The effective income tax rate was 54 percent in 1990, compared with 59 percent in 1989 and 42 percent in 1988. Adoption of the new Statement reduced the 1990 effective rate. The predominance of highly taxed foreign income was the primary reason for the slightly higher effective tax rate for 1989.

### CAPITAL RESOURCES AND LIQUIDITY

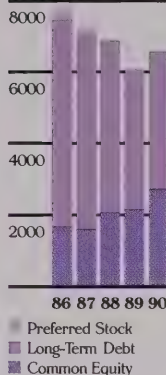
The company's current ratio, the ratio of current assets to current liabilities, was 1.1 for both 1990 and 1989. In 1990, the company's cash and cash equivalent balances decreased slightly. In addition to using cash to pay down debt, the company also increased its capital expenditures by over \$500 million and paid prior years' tax assessments and related interest of approximately \$610 million. The company's short-term liquidity position at December 31, 1990, was approximately \$690 million stronger than



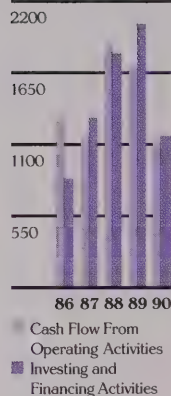
### Total Taxes, Net Income And Cash Dividends (Dollars per Average Common Share)



### Capitalization (Millions of Dollars)

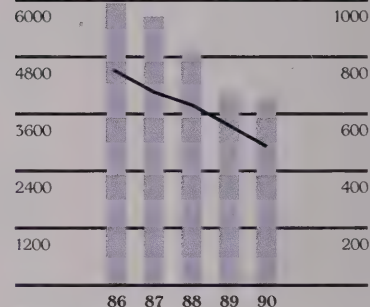


### Analysis of Cash Flows\* (Millions of Dollars)



\*The difference between cash flows from operating activities and investing and financing activities equals the change in cash.

### Debt and Interest (Millions of Dollars)



indicated because 88 percent of product inventories are valued using the last-in, first-out (LIFO) method. The LIFO method values inventories at historical costs which are lower than current prices.

Although total debt declined only slightly in 1990 to \$3.9 billion, the company was able to retire approximately \$350 million of its high-coupon debt during the year. This debt was partially refinanced through issuance of \$300 million of 9½% notes due in 1997, as the company made its first public offering since 1983. Also during the year the company's Long-Term Stock Savings Plan borrowed an additional \$400 million, guaranteed by Phillips, which it used to purchase 14,159,292 shares of the company's authorized, but previously unissued, common stock at \$28.25 per share. The new borrowing extended the life of the plan and increased employee benefit plan stock ownership to approximately 24 percent. Proceeds were used to repay other debt.

The company has \$767 million available through various revolving bank lines of credit. Of this, \$180 million had been drawn down at December 31, 1990. In addition, the company had issued \$48 million under its \$250 million letter-of-credit-supported commercial paper program.

In order to continue to reduce interest expense, the company is reviewing refinancing alternatives for its high-coupon, fixed-rate debt, callable in 1992. During 1990, Phillips secured a further upgrading of its debt from a major rating agency. The ratings of the company's senior debt support cost-effective refinancing. As a result, in 1990, the company filed with the Securities and Exchange Commission a shelf registration for \$500 million of debt securities. This combined with an earlier shelf registration gave the company the ability to issue up to \$750 million of debt securities in the U.S. public market, of which \$450 million remained at year-end. This has provided flexibility to pursue refinancing alternatives as part of the ongoing effort to reduce interest costs and facilitate the planned refinancing of \$2 billion of fixed-rate debt callable at a premium in March 1992. As part of this refinancing, the company had under way a \$350 million public offering of 9¾%, 20-year notes at February 13, 1991.

The operations of an integrated petroleum company such as Phillips are capital intensive, requiring significant capital investments over long periods. Capital expenditures for properties, plants and equipment were \$1.4 billion in 1990, compared with \$872 and \$797 million in 1989 and 1988, respectively. During this three-year period, significant expenditures have been directed toward development projects in the Gulf of Mexico, including the South Marsh Island field; expanding the waterflood project in the Norwegian North Sea; acquisition of an interest in Australia's Harriet field; a coal-seam gas project in the San Juan Basin; connecting new gas supplies to existing facilities; constructing a new alkylation unit at the Sweeny, Texas, refinery; modernizing Phillips' retail marketing outlets and increasing chemical production capacities. During this period, approximately 78 percent of the company's capital expenditures were made in the United States. Over the three-year period ending December 31, 1990, capital expenditures directed toward Exploration and Production projects accounted for 47 percent of the total; Gas and Gas Liquids—5 percent; Petroleum Products—20 percent; Chemicals—21 percent; and Corporate and Other—7 percent.

In addition to capital expenditures, the company has charged against income slightly over \$1 billion relating principally to its worldwide exploration program over the past three years. A comparison of the components of exploration expense is shown below.

	Millions of Dollars		
	1990	1989	1988
Geological and geophysical	\$164	147	105
Leasehold impairment	38	179	161
Dry holes	88	80	41
Lease rentals	9	7	9
	\$299	413*	316

\*Includes \$130 million applicable to the writedown of offshore California investments, of which \$93 and \$37 million are included in leasehold impairment and dry holes, respectively.

Construction is continuing on a 1.5-billion-pound-per-year ethylene plant which is expected to be operational in late 1991. The plant is owned by a partnership in which the company holds a 50 percent interest. Construction of the



plant and working capital requirements are being funded by financing arranged by the partnership, as well as by the partners' equity contributions. The financing is secured by the project's assets and long-term sales agreements for the ethylene to be produced from the new facility and is nonrecourse to the investors in the partnership. The company has certain commitments to the partnership which include funding the cost of the project above a specified level through the use of subordinated loans, constructing common facilities and agreeing to purchase the unsold production from the facility up to a specified maximum quantity.

Early in 1990, the company received net proceeds of \$91 million in a settlement from the Government of Iran and the National Iranian Oil Company. The settlement is the result of favorable arbitration by the Iran-United States Claims Tribunal in The Hague, Netherlands over the 1979 expropriation of Phillips' interest in two producing offshore Iranian oil fields and concludes all claims and counterclaims.

Work is continuing on the replacement of the company's U.S. polyethylene manufacturing facilities which were destroyed in an explosion and fire which occurred on October 23, 1989, at the Houston Chemical Complex owned by the company's wholly owned subsidiary, Phillips 66 Company. The facilities were covered by property insurance for the replacement cost of the destroyed facilities. At year-end, \$594 million in partial payments had been collected. When all outstanding issues are resolved, the company expects to report a financial gain from its replacement cost property insurance, because payments received will be greater than the depreciated value of the destroyed facilities. In addition, business interruption insurance has provided protection for earnings losses for both the destroyed facilities and other company operations dependent on the plant. During 1990, the company recognized in earnings \$346 million before-tax from this coverage. Cash collections from business interruption insurance during the year generally paralleled the amounts recognized as income. At year-end 1990, the company was in the start-up process for about 600 million pounds of annual capacity. It is expected that 1,200 million pounds of capacity per year will be operational by mid-1991, with a final 600 million pounds of capacity complete by mid-1992.

The company's major net income exposures to foreign currency movements are due to taxes payable in foreign countries. With the adoption of FASB Statement No. 96, the fluctuations in net income due to exchange rate movements more closely follow the impact to the cash flow of the company. Phillips hedges, where feasible and appropriate, foreign exchange exposures which impact cash flow.

## OUTLOOK

- The company has budgeted approximately \$1.5 billion for capital expenditures and investments in 1991. Major expenditures for upstream projects will include expansion of the Ekofisk field waterflood project, the Embla field (formerly South Eldfisk) development, a gas project in Australia, and payments on two new liquefied natural gas tankers under construction.

Downstream expenditures will be directed toward building company-operated retail service stations, constructing a hazardous waste incinerator at the Sweeny refinery, renovating the Houston Chemical Complex infrastructure, continuing construction of ethylene manufacturing capacities and continuing to upgrade the company's terminals and pipelines. Restoration of the polyethylene capacity destroyed by the explosion and fire in 1989 is not generally included in the company's capital budget since proceeds from the company's replacement cost property insurance are expected to fund most of the restoration.

- Construction is being expedited to restore polyethylene production capacity at HCC. HCC continues in the start-up phase for production from 600 million pounds of annual capacity. Production is expected during the first quarter of 1991. It is expected that an additional 600 million pounds of capacity will be operational by mid-1991, and by mid-1992 total annual capacity is expected to be 1.8 billion pounds, the level that existed or was under construction at the time of the accident.
- Although the company and its co-venturers have faced continued delays in receiving regulatory approval, limited production is expected to begin in 1991 from the Point Arguello field offshore California.
- The company obtains approximately 24 percent of its U.S. crude oil refinery requirements from Saudi Arabia. There has been no disruption of these supplies, and it is generally believed that this source of supply is not susceptible to major interruption as a result of the current hostilities in the Middle East. It is expected that the U.S. Strategic Petroleum Reserve would be available to the industry, including the company, to offset potential disruptions of crude oil supplies.
- Over the last few years, the company has taken aggressive steps to reduce its debt to its present \$3.9 billion level. At this time, the company considers \$4-\$4.5 billion of debt to be a reasonable level. The company plans to strengthen its balance sheet by keeping debt near present levels and increasing equity through retained earnings. As a result, Phillips anticipates directing most of its cash flow to increase capital spending and to enhance shareholder return.
- The company plans to refinance the remaining \$2 billion of high-coupon debt, which is callable in 1992, by arranging additional lines of credit and issuing public debt.
- Due to the situation in the Middle East and the related uncertainty, prices during the last part of 1990 were extremely volatile, and it is not known whether these price levels will be sustained.
- Early in 1991, the Board of Directors authorized the purchase of up to \$100 million of the company's common stock through 1992. Stock purchased under the program will be held as treasury shares and may be used for general corporate purposes including employee benefit programs.



## QUARTERLY COMMON STOCK PRICES AND CASH DIVIDENDS PER SHARE

	Stock Price		Dividends
	High	Low	
<b>1990</b>			
First	<b>\$27</b>	<b>22½</b>	<b>.25</b>
Second	<b>27¾</b>	<b>23¾</b>	<b>.25</b>
Third	<b>31½</b>	<b>25½</b>	<b>.25</b>
Fourth	<b>27¾</b>	<b>23¾</b>	<b>.28</b>
<b>1989</b>			
First	23¾	19¾	.22
Second	24¾	21½	.22
Third	30¾	21¾	.25
Fourth	27¾	21¾	.25

Closing Stock Price at December 31, 1990 **\$26¾**

Number of Stockholders of Record at January 31, 1991 **89,480**

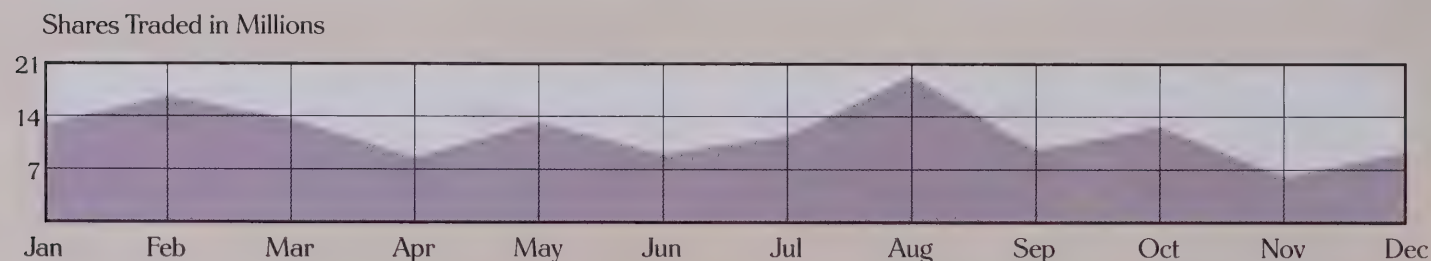
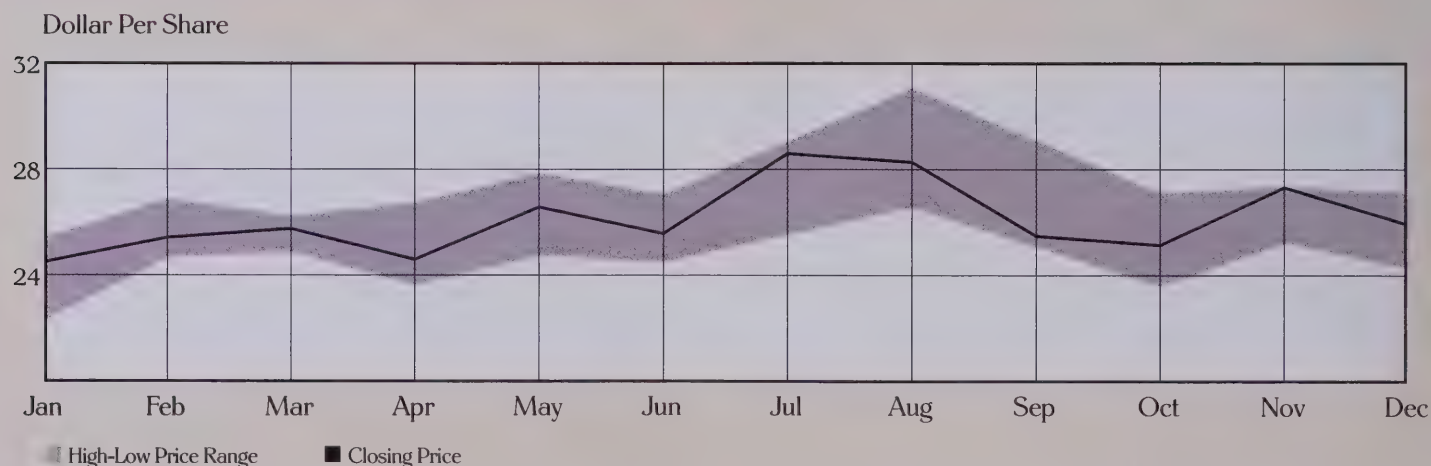
Phillips' common stock is traded on the New York, Pacific and Toronto stock exchanges.

## SELECTED FINANCIAL DATA

	Millions of Dollars Except Per Share Amounts				
	1990	1989	1988	1987	1986
Sales and other operating revenues	<b>\$13,603</b>	12,384	11,304	10,721	9,788
Income before extraordinary item and cumulative effect of change in accounting principle	<b>541</b>	219	650	35	228
Net income	<b>779</b>	219	650	35	228
Per common share					
Income before extraordinary item and cumulative effect of change in accounting principle	<b>2.18</b>	.90	2.72	.06	.89
Net income	<b>3.13</b>	.90	2.72	.06	.89
Total assets	<b>12,130</b>	11,256	11,968	12,111	12,403
Long-term debt	<b>3,839</b>	3,939	4,761	5,419	5,758
Redeemable preferred stock	—	—	—	205	270
Cash dividends declared per share					
Common	<b>1.03</b>	.94	.66	.60	.70
Preferred	—	—	1.34	1.73	2.02

See Management's Discussion and Analysis for discussion of factors that would enhance an understanding of these financial data.

## MONTHLY STOCK PERFORMANCE – 1990





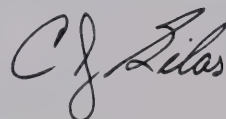
## REPORT OF MANAGEMENT

Management prepared, and is responsible for, the consolidated financial statements and the other information appearing in this annual report. Management believes that the consolidated financial statements fairly present the company's financial position, results of operations and cash flows in conformity with generally accepted accounting principles. In preparing its consolidated financial statements, the company includes amounts that are based on estimates and judgments which Management believes are reasonable under the circumstances.

The company maintains an internal control structure designed to provide reasonable assurance that the company's assets are protected from unauthorized use and that all transactions are executed in accordance with established authorizations and recorded properly. The internal control structure is supported by written policies and guidelines and is complemented by a staff of internal auditors.

The company's financial statements have been audited by Ernst & Young, independent auditors selected by the Audit Committee and approved by the stockholders. Management has made available to Ernst & Young all the company's financial records and related data, as well as the minutes of stockholders' and directors' meetings.

The Audit Committee of the Board of Directors, composed solely of non-employee directors, meets periodically with the independent auditors, financial and accounting management, and the internal auditors to review and discuss the company's internal control structure, results of internal audits, the independent auditors' findings and opinion, financial information, and related matters. Both the independent auditors and the company's General Auditor have unrestricted access to the Audit Committee, without management present, to discuss any matter which they wish to call to the Committee's attention.



C. J. Silas  
Chairman of the Board and Chief Executive Officer

February 13, 1991

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## REPORT OF INDEPENDENT AUDITORS

The Board of Directors and Stockholders  
Phillips Petroleum Company

We have audited the accompanying consolidated balance sheets of Phillips Petroleum Company as of December 31, 1990 and 1989, and the related consolidated statements of income, changes in stockholders' equity and cash flows for each of the three years in the period ended December 31, 1990. These financial statements are the responsibility of the company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Phillips Petroleum Company at December 31, 1990 and 1989, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 1990 in conformity with generally accepted accounting principles.

As discussed in Note 1 to the financial statements, effective January 1, 1990 the company adopted Statement of Financial Accounting Standards No. 96, "Accounting for Income Taxes."



Tulsa, Oklahoma  
February 13, 1991



# CONSOLIDATED STATEMENT OF INCOME

PHILLIPS PETROLEUM COMPANY

Years Ended December 31

Millions of Dollars

	1990	1989	1988
<b>Revenues</b>			
Sales and other operating revenues	\$13,603	12,384	11,304
Equity in earnings of affiliated companies	36	(7)	32
Other revenues	336	115	154
<b>Total Revenues</b>	<b>13,975</b>	<b>12,492</b>	<b>11,490</b>

## Costs and Expenses

Purchased crude oil and products	8,312	7,185	6,176
Production and operating expenses	1,979	1,899	1,678
Exploration expenses	299	413	316
Selling, general and administrative expenses	540	517	439
Depreciation, depletion, amortization and retirements	808	1,106	868
Taxes other than income taxes	230	191	210
Interest and expense on indebtedness	620	645	688
<b>Total Costs and Expenses</b>	<b>12,788</b>	<b>11,956</b>	<b>10,375</b>

Income before income taxes, extraordinary item and cumulative effect of change in accounting principle	1,187	536	1,115
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Provision for income taxes	646	317	465
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<b>Income before Extraordinary Item and Cumulative Effect of Change in Accounting Principle</b>	<b>541</b>	<b>219</b>	<b>650</b>
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Extraordinary gain	101	—	—
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Cumulative effect of change in accounting for income taxes	137	—	—
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<b>Net Income</b>	<b>\$ 779</b>	<b>219</b>	<b>650</b>
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<b>Net Income Applicable to Common Stock</b>	<b>\$ 779</b>	<b>219</b>	<b>639</b>
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## Per Share of Common Stock

Income before extraordinary item and cumulative effect of change in accounting principle	\$ 2.18	.90	2.72
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Extraordinary gain	.40	—	—
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Cumulative effect of change in accounting for income taxes	.55	—	—
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<b>Net Income</b>	<b>\$ 3.13</b>	<b>.90</b>	<b>2.72</b>
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<b>Average Common Shares Outstanding</b> (in thousands)	<b>249,060</b>	<b>243,738</b>	<b>234,984</b>
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See Accounting Policies and Notes to Financial Statements.



# CONSOLIDATED BALANCE SHEET

PHILLIPS PETROLEUM COMPANY

At December 31

	Millions of Dollars	
	1990	1989
<b>Assets</b>		
Cash and cash equivalents	\$ 670	708
Accounts and notes receivable (less allowances: 1990—\$20; 1989—\$18)	1,595	1,351
Inventories	704	584
Deferred income taxes	170	—
Prepaid expenses and other current assets	183	233
<b>Total Current Assets</b>	<b>3,322</b>	<b>2,876</b>
Investments and long-term receivables	456	489
Properties, plants and equipment (net)	8,301	7,832
Deferred charges	51	59
<b>Total Assets</b>	<b>\$12,130</b>	<b>11,256</b>
<b>Liabilities</b>		
Accounts payable	\$ 1,372	1,230
Notes payable	—	30
Long-term debt due within one year	59	56
Accrued income and other taxes	1,267	1,165
Other accruals	212	225
<b>Total Current Liabilities</b>	<b>2,910</b>	<b>2,706</b>
Long-term debt	3,839	3,939
Accrued dismantlement, removal and environmental costs	470	346
Deferred income taxes	1,283	1,721
Other liabilities and deferred credits	909	412
<b>Total Liabilities</b>	<b>9,411</b>	<b>9,124</b>
<b>Stockholders' Equity</b>		
Common stock—500,000,000 shares authorized at \$1.25 par value		
Issued (1990—277,180,511 shares; 1989—263,021,219 shares)		
Par value	346	329
Capital in excess of par	914	485
Treasury stock (at cost: 1990—18,460,827 shares; 1989—19,125,846 shares)	(1,066)	(1,155)
Foreign currency translation adjustments	2	(21)
Guarantees for Long-Term Stock Savings Plan (LTSSP)	(600)	(225)
Earnings employed in the business	3,123	2,719
<b>Total Stockholders' Equity</b>	<b>2,719</b>	<b>2,132</b>
<b>Total Liabilities and Stockholders' Equity</b>	<b>\$12,130</b>	<b>11,256</b>

See Accounting Policies and Notes to Financial Statements.



# CONSOLIDATED STATEMENT OF CASH FLOWS

PHILLIPS PETROLEUM COMPANY

Years Ended December 31

	Millions of Dollars		
	1990	1989	1988
<b>Cash Flows from Operating Activities</b>			
Net income	\$ 779	219	650
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, depletion, amortization and retirements	808	1,106	868
Dry hole costs and leasehold impairment	126	259	202
Deferred taxes	(245)	(153)	170
Cumulative effect of accounting change	(137)	—	—
Gain on extraordinary item	(101)	—	—
Decrease (increase) in accounts and notes receivable	(244)	(90)	8
Increase in inventories	(120)	(22)	(19)
Decrease (increase) in prepaid expenses and other current assets	(203)	8	(93)
Increase (decrease) in accounts payable	142	224	(10)
Increase (decrease) in taxes and other accruals	(80)	61	121
Other	379	42	(32)
<b>Net Cash Provided by Operating Activities</b>	<b>1,104</b>	<b>1,654</b>	<b>1,865</b>
<b>Cash Flows from Investing Activities</b>			
Capital expenditures, including dry hole costs	(1,383)	(872)	(797)
Proceeds from property insurance	594	—	—
Proceeds from extraordinary item	91	—	—
Property dispositions	22	37	127
Investment purchases	(47)	(122)	(59)
Investment sales	15	19	19
<b>Net Cash Used for Investing Activities</b>	<b>(708)</b>	<b>(938)</b>	<b>(710)</b>
<b>Cash Flows from Financing Activities</b>			
Issuance of debt	601	825	687
Repayment of debt	(1,148)	(1,668)	(1,638)
Issuance of company stock	406	5	252
Purchase of company stock	(37)	—	(215)
Dividends paid	(256)	(229)	(168)
Redemption of Preferred Share Purchase Rights	—	(20)	—
<b>Net Cash Used for Financing Activities</b>	<b>(434)</b>	<b>(1,087)</b>	<b>(1,082)</b>
<b>Increase (Decrease) in Cash and Cash Equivalents</b>	<b>(38)</b>	<b>(371)</b>	<b>73</b>
Cash and cash equivalents at beginning of year	708	1,079	1,006
<b>Cash and Cash Equivalents at End of Year</b>	<b>\$ 670</b>	<b>708</b>	<b>1,079</b>

See Accounting Policies and Notes to Financial Statements.



# CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY

PHILLIPS PETROLEUM COMPANY

	Millions of Dollars							
	Shares of Common Stock		Common Stock			Foreign Currency Translation Adjustments	Guarantees for LTSSP	Earnings Employed in the Business
	Issued	Held in Treasury	Par Value	Capital in Excess of Par	Treasury Stock			
December 31, 1987	248,684,301	20,333,852	\$311	224	(1,238)	(31)	—	2,351
Net income								650
Cash dividends declared and paid								
Common								(157)
Preferred								(11)
Distributed under incentive compensation plans		(566,094)		12	40			(42)
Sold to LTSSP	14,336,918		18	232			(250)	
Current period translation adjustment						(2)		
Translation adjustment recognized upon disposal of foreign investments						9		
Other		450		2				(5)
December 31, 1988	263,021,219	19,768,208	329	470	(1,198)	(24)	(250)	2,786
Net income								219
Cash dividends declared and paid on common stock								(229)
Redemption of Preferred Share Purchase Rights								(20)
Distributed under incentive compensation plans		(707,362)		14	44			(42)
Reduction of guarantees of LTSSP borrowings							25	
Current period translation adjustment						3		
Stock purchases		65,000			(1)			
Other				1				5
December 31, 1989	263,021,219	19,125,846	329	485	(1,155)	(21)	(225)	2,719
Net income								779
Cash dividends declared and paid on common stock								(256)
Distributed under incentive compensation plans		(1,969,065)		43	122			(119)
Sold to LTSSP	14,159,292		17	383			(400)	
Reduction of guarantees of LTSSP borrowings							25	
Current period translation adjustment						23		
Stock purchases		1,293,900			(33)			
Other		10,146		3				
December 31, 1990	277,180,511	18,460,827	\$346	914	(1,066)	2	(600)	3,123

See Accounting Policies and Notes to Financial Statements.



■ **Consolidation Principles and Investments**—All significant, majority-owned subsidiaries are consolidated. Investments in companies owned 20 to 50 percent and corporate joint ventures (affiliates) and other companies are accounted for using the equity method or cost, as appropriate.

■ **Cash Equivalents**—Cash equivalents are highly liquid short-term investments that are readily convertible to known amounts of cash and generally have original maturities within three months from their date of purchase.

■ **Inventories**—Crude oil and petroleum and chemical products are valued at cost, which is lower than market in the aggregate, mainly on the last-in, first-out (LIFO) basis. Materials and supplies are valued at or below average cost.

■ **Oil and Gas Exploration and Development**—Oil and gas exploration and development costs are accounted for using the successful efforts method of accounting.

**Property Acquisition Costs**—Oil and gas leasehold acquisition costs are capitalized. Leasehold impairment is recognized based on exploratory experience. Upon discovery of commercial reserves, leasehold costs are transferred to producing properties.

**Exploratory Costs**—Geological and geophysical expenses and the costs of carrying and retaining undeveloped properties are charged against income as incurred. Exploratory drilling costs are capitalized when incurred. If exploratory wells are determined to be commercially unsuccessful or dry holes, applicable costs are expensed.

**Development Costs**—Costs incurred to drill and equip development wells, including unsuccessful development wells, are capitalized.

**Impairment of Proved Properties**—For “ceiling test” calculations, all proved properties are evaluated in the aggregate using one worldwide cost center. Additionally, high-cost proved properties are evaluated prior to start-up of production and any significant impairment is recognized currently.

**Depletion and Amortization**—Leasehold costs of producing properties are depleted using the unit-of-production method based on estimated proved oil and gas reserves. Amortization of intangible development costs is based on the unit-of-production method using the estimated proved developed oil and gas reserves.

■ **Depreciation and Amortization**—Depreciation and amortization of properties, plants and equipment, including assets under capital leases, are determined by the group straight-line method, the individual unit straight-line method or the unit-of-production method, applying the method considered most appropriate for each type of property.

■ **Property Dispositions**—When complete units of depreciable property are retired or sold, the asset cost and related accumulated depreciation are eliminated with any gain or loss reflected in income. When less than complete units of depreciable property are disposed of or retired, the difference between asset cost and salvage value is charged or credited to accumulated depreciation.

■ **Maintenance and Repairs**—Maintenance and repair costs are expensed as incurred. Significant improvements are capitalized.

■ **Dismantlement, Removal and Environmental Costs**—The estimated costs, net of salvage values, of dismantling and removing major facilities, including necessary site restoration, are accrued using either the unit-of-production or the straight-line method.

Environmental expenditures are expensed or capitalized as appropriate, depending upon their future economic benefit. Expenditures that relate to an existing condition caused by past operations and that do not have future economic benefits are expensed. Liabilities for these expenditures are recorded when environmental assessments and/or cleanups are probable, and the costs can be reasonably estimated. Generally, the timing of these accruals coincides with the company’s commitment to a formal plan of action.

■ **Foreign Currency Translation**—The U.S. dollar is the functional currency for most of the company’s operations. Adjustments resulting from the process of translating foreign functional currency financial statements into U.S. dollars are accumulated as a separate component of stockholders’ equity. Foreign currency transaction gains and losses, which include the incremental income taxes caused by changes in exchange rates, are included in current earnings.

■ **Income Taxes**—Allowable tax credits are applied currently as reductions of the provision for income taxes. No provision for U.S. income taxes is made on undistributed earnings of certain companies and corporate joint ventures because of reinvestment plans for such funds.

■ **Income Per Share of Common Stock**—Income per share of common stock is calculated based upon the daily weighted average number of common shares outstanding during the year.

### Note 1—Extraordinary Item and Accounting Change

In January 1990, the company recorded a \$101 million gain (\$.40 per share) from the settlement of litigation with the Government of Iran and the National Iranian Oil Company. The dispute was over the 1979 expropriation of Phillips' interest in two producing offshore Iranian oil fields and concludes all claims and counterclaims.

Effective January 1, 1990, the company adopted FASB Statement No. 96, "Accounting for Income Taxes," which requires an asset and liability approach in accounting for income taxes. Under the new method, the amount of deferred tax liabilities or assets is calculated by applying the provisions of enacted tax law to determine the amount of taxes payable or refundable currently or in future years. The effect of the change was to increase income before extraordinary item and cumulative effect of a change in accounting principle by \$130 million (\$.52 per share) for the year. In addition, the cumulative effect of the change on prior years increased net income by \$137 million (\$.55 per share). Prior years' financial statements have not been restated.

### Note 2—Writedown of Offshore California Investments

In the fourth quarter of 1989, the company recorded a \$423 million before-tax charge for the writedown of its offshore California investments prompted by continuing delays in receiving the regulatory approvals necessary to begin crude oil and natural gas production. The writedown applied to the company's interest in the Point Arguello field and associated production, transportation and onshore processing facilities; suspended exploratory wells in the Rocky Point field; and other offshore California leases. On an after-tax basis, the writedown reduced 1989 net income \$280 million (\$1.15 per share).

### Note 3—Inventories

Inventories at December 31 consisted of the following:

	Millions of Dollars	
	1990	1989
Crude oil and petroleum products	\$309	279
Chemical products	282	196
Materials, supplies and other	113	109
	<b>\$704</b>	<b>584</b>

Inventories valued on a LIFO basis totaled \$525 and \$423 million at December 31, 1990 and 1989, respectively, and would have been approximately \$690 and \$426 million higher, respectively, had they been valued using the first-in, first-out (FIFO) method.

### Note 4—Investments and Long-Term Receivables

Components of investments and long-term receivables at December 31 were as follows:

	Millions of Dollars	
	1990	1989
Investments in and advances to affiliated companies	\$402	448
Long-term receivables	33	31
Other investments	21	10
	<b>\$456</b>	<b>489</b>

Earnings employed in the business at December 31, 1990, included \$69 million relating to undistributed earnings of affiliated companies. Distributions received from affiliated companies were \$43, \$56 and \$41 million in 1990, 1989 and 1988, respectively.

### Note 5—Properties, Plants and Equipment

The company's investment in properties, plants and equipment (at cost) at December 31 is summarized as follows:

	Millions of Dollars	
	1990	1989
Exploration and Production	\$ 9,151	8,854
Gas and Gas Liquids	2,047	2,010
Petroleum Products	3,408	3,212
Chemicals	1,880	1,520
Corporate and Other	1,087	1,031
	<b>17,573</b>	<b>16,627</b>
Accumulated depreciation, depletion and amortization	9,272	8,795
	<b>\$ 8,301</b>	<b>7,832</b>

### Note 6—Debt

#### Long-Term

Long-term debt due after one year at December 31 consisted of the following:

	Millions of Dollars	
	1990	1989
14¾% Subordinated Debentures Due 2000	\$ 840	1,047
13¾% Senior Notes Due 1997	1,153	1,299
12¼% Debentures Due 2012	288	288
11¼% Debentures Due 2013	223	223
9½% Notes Due 1997	299	—
8¾% Debentures Due 2000	103	103
7¾% Debentures Due 2001	69	69
5¾% Marine Terminal Revenue Bonds, Series 1977 Due 2007	20	20
Revolving debt due to banks and others through 1997 at 8½%-9½%	191	684
Guarantees of LTSSP bank loan and notes payable at 6¾%-8¾%	581	200
Other obligations	72	6
	<b>\$3,839</b>	<b>3,939</b>

Maturities of long-term debt in 1991 through 1995 are: \$59 million (included in current liabilities), \$45, \$177, \$510 and \$300 million, respectively.



During 1990, the LTSSP borrowed an additional \$400 million under a fifteen-year-term bank loan, which has provisions for variable interest rates. (See Note 10 for additional discussion of the LTSSP.) Any participating bank in the syndicate of lenders may cease to participate on November 30, 1997, by giving not less than 180 days prior notice to the LTSSP and the company. Also, each bank participating in the LTSSP loan has the optional right, if the current directors or their approved successors cease to be a majority of the Board, and upon not less than 90 days' notice, to cease to participate in the loan. Under the above conditions, such banks' rights and obligations under the loan agreement must be purchased by the company if not transferred to another bank of Phillips' choice.

The LTSSP notes payable have scheduled maturities through 1998 and are supported by irrevocable bank letters of credit with a scheduled expiration date of July 1994. As part of its revolving debt, the company has a \$250 million commercial paper program also supported by a direct-pay irrevocable bank letter of credit with a scheduled expiration date of September 1994. The majority of the LTSSP notes and commercial paper have been classified as noncurrent based on the company's ability and intent to refinance them on a long-term basis.

Each bank providing an irrevocable letter of credit for the LTSSP notes and the commercial paper program has the optional right, if the current directors or their approved successors cease to be a majority of the Board, and upon not less than 90 days' notice, to terminate its obligation under the agreements pertaining to the letters of credit.

### Lines of Credit

The company has available \$767 million of bank lines of credit. At December 31, 1990, there was \$587 million remaining to be drawn down. Included in the agreements for \$500 million of these lines are similar optional early termination rights like that described in the preceding paragraph.

### Compensating Balances

The company maintains compensating balances for banking services under various arrangements with several banks. The compensating balances are not legally restricted as to withdrawal and are continually reviewed and adjusted based on levels of services and activity. The total of all compensating balances is not material in relation to total liquid assets.

### Note 7—Other Contingent Liabilities

The company has contingent liabilities resulting from throughput agreements with pipeline and processing companies in which it holds stock interests. Under these agreements, Phillips may be required to provide any such company with additional funds through advances against future charges for the shipping or processing of petroleum liquids, natural gas and refined products.

The company is a party to a number of legal proceedings pending in various courts or agencies in which it or a subsidiary appears as plaintiff or defendant for which no provision has been made.

While it is not possible at this time to establish the ultimate amount of liability with respect to contingent liabilities, including those related to legal proceedings, the company is of the opinion that the aggregate amount of any such liabilities, for which provision has not been made, will not have a material adverse effect on its financial position.

### Note 8—Preferred Share Purchase Rights

On July 31, 1989, the company redeemed its outstanding Preferred Share Purchase Rights for 8⅓ cents per right and distributed to its shareholders one new Preferred Share Purchase Right (Right) for each outstanding share of the company's common stock. The newly issued Rights enable holders to either acquire additional shares of Phillips common stock or purchase the stock of the acquiring company at a discount, depending on specific circumstances. The Rights, which expire July 31, 1999, will be exercisable only if a person or group acquires 20 percent or more of the company's common stock or announces a tender offer which would result in ownership of 20 percent or more of the common stock. The Rights may be redeemed by the company in whole, but not in part, for one cent per Right. At December 31, 1990, there were 258,719,684 Rights outstanding.

### Note 9—Non-Mineral Operating Leases

The company leases service stations, computers and other facilities and equipment. At December 31, 1990, future minimum payments due under noncancelable operating leases were as follows:

	Millions of Dollars
1991	\$ 46
1992	32
1993	20
1994	17
1995	13
Remaining years	66
	<u>\$194</u>

Operating lease rental expense for the years ended December 31 was as follows:

	Millions of Dollars		
	1990	1989	1988
Total rentals	<u>\$93</u>	81	83
Less sublease rentals	5	6	6
	<u>\$88</u>	75	77

### Note 10—Employee Benefit Plans

#### Defined Benefit Plans

The company has defined benefit retirement plans covering substantially all employees. Plans are generally noncontributory with benefit formulas based on employee earnings and credited service. The company's funding policy for U.S. plans is to contribute the minimum required by the Employee Retirement Income Security Act of 1974. Contributions to foreign plans are dependent upon local laws and tax regulations. The company also sponsors nonqualified

supplementary retirement plans for senior management and nonemployee directors.

Net pension cost was as follows:

	Millions of Dollars				
	U.S. Plans			Foreign Plans	
	1990	1989	1988	1990	1989
Service cost— benefits earned during the period	\$ 22	19	17	5	4
Interest cost on projected benefit obligation	27	23	19	9	6
Return on assets Actual	4	(57)	(35)	7	(11)
Deferred gains (losses)	(35)	34	16	(18)	3
Amortization of Net asset	(7)	(7)	(7)	—	—
Net gains	(5)	(1)	—	—	—
Prior service cost	1	—	—	—	—
Net pension cost	\$ 7	11	10	3	2

In determining net pension cost, the company has elected to amortize net gains and losses on a straight-line basis over 10 years.

All of the company's funded plans have assets in excess of the accumulated benefit obligation. Assets include a participation right to an annuity contract, commingled funds, real estate, stocks, bonds and insurance contracts. A foreign plan also holds home mortgage loans. The following table presents the funded status of the plans and a reconciliation with accrued pension cost and deferred gain on reversion at December 31.

	Millions of Dollars			
	U.S. Plans		Foreign Plans	
	1990	1989	1990	1989
Plan assets at fair value	\$ 261	261	89	83
Actuarial present value of benefit obligations				
Vested benefits	88	79	33	33
Nonvested benefits	12	5	6	5
Accumulated benefit obligation	100	84	39	38
Effect of projected future salary increases	204	186	59	40
Projected benefit obligation	304	270	98	78
Excess assets (obligation)	(43)	(9)	(9)	5
Unrecognized net asset	(69)	(75)	(5)	(5)
Unrecognized net (gains) losses	(9)	(31)	13	2
Unrecognized prior service cost	10	8	4	—
(Accrued) prepaid pension cost and deferred gain on reversion	\$(111)	(107)	3	2

#### Assumptions—Weighted Average at December 31

Rate of increase in compensation levels	6.50%	6.50	8.35	7.55
Discount rate	10.00	9.50	10.70	9.90
Long-term rate of return on assets	12.00	11.75	11.55	11.35

Accrued pension cost and deferred gain on reversion is reflected in the Consolidated Balance Sheet as follows:

	Millions of Dollars	
	1990	1989
Prepaid expenses and other current assets	\$ 1	1
Deferred charges	7	5
Other accruals	(1)	(1)
Other liabilities and deferred credits	(115)	(110)
	\$(108)	(105)

#### Other Postretirement Plans

In late 1990, the Financial Accounting Standards Board adopted Statement No. 106, "Employers' Accounting for Postretirement Benefits Other Than Pensions." The company is not required to adopt Statement No. 106 until 1993 but does not expect the liability that results to be material to the company's financial position. The company sponsors plans that provide certain health care and life insurance benefits for substantially all retired U.S. employees, but essentially these retirees pay their own way. The majority of all foreign retirees are covered by government-sponsored programs.

#### Defined Contribution Plans

Most employees may elect to participate in the company-sponsored Thrift Plan by contributing a portion of their earnings to any of three different investment funds. A specified percentage of the employee contribution is matched by the company. Company contributions charged to expense were \$5, \$5 and \$23 million in 1990, 1989 and 1988, respectively.

In 1988, the company established the Long-Term Stock Savings Plan (LTSSP), an employee stock ownership plan. Most employees may elect to participate in the LTSSP by contributing 1 percent of their earnings and participants receive an allocation of shares of common stock proportionate to their contribution. During 1988, the LTSSP borrowed \$250 million to purchase 14,336,918 shares of authorized, but previously unissued, common stock from the company at \$17.4375 per share. During 1990, the LTSSP borrowed \$400 million and purchased an additional 14,159,292 shares of authorized, but unissued, common stock from the company at \$28.25 per share. Since the company guaranteed the LTSSP's borrowings, the unpaid balance is reported as a liability of the company and an amount similar to unearned compensation is shown as a reduction of stockholders' equity. The debt is serviced by the LTSSP from company contributions and dividends received on shares of common stock held by the plan.



The company recognizes interest expense as incurred and compensation expense based on the cost of shares allocated for the period. Dividends used to service the LTSSP debt reduce the amount of expense recognized each period. Company contributions to the LTSSP in 1990, 1989 and 1988 were \$27, \$31 and \$2 million, respectively. Dividends used to service debt were \$15, \$12 and \$5 million in 1990, 1989 and 1988, respectively. Interest incurred on the LTSSP debt in 1990, 1989 and 1988 was \$25, \$18 and \$8 million, respectively.

### Incentive Compensation Plans

At December 31, 1990, the company had three incentive compensation plans to provide awards to key employees—the Incentive Compensation Plan, and the 1986 and 1990 Stock Plans. In anticipation of awards that may become payable under the plans, provisions of \$26, \$31 and \$25 million have been charged against earnings in 1990, 1989 and 1988, respectively.

The 1986 and 1990 Stock Plans, each of which includes a Stock Option Plan and a Strategic Incentive Plan, are in effect for the five-year periods beginning January 1, 1986, through December 31, 1990, and January 1, 1990, through December 31, 1994, respectively. The maximum number of shares of the company's common stock that may be used to satisfy the plans' obligations, subject to stock splits, stock dividends and other similar actions, is approximately 16.5 million shares.

Stock options granted under provisions of the Stock Option Plans permit the purchase of shares of the company's common stock at exercise prices equivalent to the average market price of the stock on the date the options were granted. The options have a term of 10 years and normally become exercisable in increments up to 25 percent on each anniversary date following the date of grant. Stock Appreciation Rights (SARs) may from time to time be affixed to the options. Options exercised in the form of SARs permit the holder to receive stock, or a combination of cash and stock, equivalent to the excess of the average market price on the exercise date over the exercise price.

During 1990, the company granted options for 2,471,807 shares of stock; options for 23,786 shares were forfeited and options for 615,595 shares were exercised at prices ranging from \$12.63 to \$20.63 per share. At December 31, 1990, 6,378,060 shares were under option (including 935,143 with SARs) at exercise prices ranging from \$12.63 to \$28.57. Options for 1,632,476 shares were exercisable.

### Note 11—Taxes

Taxes charged to income before extraordinary item and cumulative effect of change in accounting principle were as follows:

	Millions of Dollars		
	1990	1989	1988
<b>Taxes Other Than Income Taxes</b>			
Property	\$ 71	65	66
Production	82	67	61
Payroll	55	46	48
Environmental	25	18	19
Other	(3)	(5)	16
	230	191	210
<b>Income Taxes</b>			
Federal			
Current	140	59	77
Deferred	(88)	(111)	87
Foreign			
Current	709	374	314
Deferred	(126)	(19)	(36)
State and local (current)	11	14	23
	646	317	465
Total taxes charged to income before extraordinary item and cumulative effect of change in accounting principle	\$ 876	508	675

Deferred income taxes at December 31, 1990, result primarily from differences between accounting for financial reporting purposes and accounting for tax purposes for depreciation, depletion, intangible drilling costs, contingencies, employee benefits, inventories and other accruals. Major components of the deferred income tax provision were:

	Millions of Dollars		
	1990	1989	1988
Depreciation	\$(121)	(15)	2
Intangible drilling and certain other costs	4	21	(15)
Writedown of offshore California investments	—	(142)	—
Dismantlement provision	(16)	(9)	(9)
Leasehold impairment	5	(5)	58
Contingencies and accruals	32	7	17
Employee benefit plans	(21)	3	13
Alternative minimum tax credit	(83)	—	—
Other	(14)	10	(15)
	\$(214)	(130)	51

Deferred taxes have not been provided for the company's equity in undistributed earnings of certain companies and corporate joint ventures because of reinvestment plans for such funds. At December 31, 1989 and 1988, the aggregate of these funds was \$231 and \$267 million, respectively, excluding amounts which, if remitted, would be expected to result in little or no tax because of available tax credits and deductions. Under FASB Statement No. 96, at December 31, 1990, the temporary differences related to undistributed

earnings for which deferred taxes have not been provided was \$268 million. Determination of the amount of unrecognized deferred taxes on these unremitted earnings is not practicable due to foreign tax credits and exclusions. The amount of withholding taxes that would be payable upon remittance of these earnings would be \$14 million.

The amounts of U.S. and outside U.S. income before income taxes, extraordinary item and cumulative effect of change in accounting principle and a reconciliation of tax at the federal statutory rate with the provision for income taxes follow:

	Millions of Dollars			Percent of Pretax Income		
	1990	1989	1988	1990	1989	1988
Income (loss) before income taxes, extraordinary item and cumulative effect of change in accounting principle						
United States	\$ 208	(127)	518	17.5%	(23.7)	46.5
Outside United States	979	663	597	82.5	123.7	53.5
	<b>\$1,187</b>	<b>536</b>	<b>1,115</b>	<b>100.0%</b>	<b>100.0</b>	<b>100.0</b>
Federal statutory income tax	\$ 404	182	379	34.0%	34.0	34.0
Foreign taxes in excess of federal statutory rate	215	146	80	18.1	27.2	7.2
Possession tax credit	(4)	(28)	(19)	(.3)	(5.2)	(1.7)
Capital losses in excess of capital gains	28	—	—	2.4	—	—
State income taxes—net of federal benefit	7	9	15	.6	1.7	1.3
Other	(4)	8	10	(.4)	1.4	.9
	<b>\$ 646</b>	<b>317</b>	<b>465</b>	<b>54.4%</b>	<b>59.1</b>	<b>41.7</b>

Excise taxes collected on the sale of petroleum products and paid to taxing agencies were \$507, \$449 and \$499 million for the years ended December 31, 1990, 1989 and 1988, respectively. These taxes are excluded from reported revenues.

The company's U.S. income tax returns examined by the Internal Revenue Service are closed through 1974. The company is of the opinion that any unsettled issues for subsequent years will not have a material effect on the financial position of the company.

## Note 12—Cash Flow Information

	Millions of Dollars		
	1990	1989	1988
<b>Noncash investing and financing activities</b>			
Investment in joint ventures in exchange for noncash assets	\$ —	24	43
Guarantees of LTSSP borrowings	400	—	250
Reduction of guarantees of LTSSP borrowings	25	25	—
Treasury stock issued for incentive compensation plans	40	7	10
<b>Cash payments</b>			
Interest	\$870	604	681
Income taxes	960	448	284

## Note 13—Other Financial Information

	Millions of Dollars Except Per Share Amounts		
	1990	1989	1988
<b>Interest</b>			
Incurred			
Debt	\$471	543	637
Other	157	106	83
	<b>628</b>	<b>649</b>	<b>720</b>
Capitalized	(8)	(4)	(32)
Expensed	\$620	645	688
<b>Maintenance and repairs—expensed*</b>	<b>\$469</b>	<b>568</b>	<b>435</b>
<b>Research and development expenditures—expensed</b>	<b>\$127</b>	<b>133</b>	<b>101</b>
<b>Foreign currency transaction gains—after-tax</b>	<b>\$ 30</b>	<b>12</b>	<b>29</b>
<b>Cash dividends declared and paid per share</b>			
Common	\$1.03	.94	.66
Preferred	—	—	1.34

\*Includes expenses of \$7, \$120 and \$41 million in 1990, 1989 and 1988, respectively, to construct a concrete wave barrier to protect a facility offshore Norway.

## Note 14—Segment and Geographic Information

The company is involved primarily in Petroleum and Chemicals operations. Petroleum operations are fully integrated and involve the exploration, production, processing, transportation and refining of crude oil and natural gas, together with the subsequent transportation and marketing of products derived therefrom. This segment also provides feedstock for the production of petrochemicals. Chemicals operations involve the manufacture and marketing of a broad range of petroleum-based chemical products. Minerals and various other operations are included in Other.

Sales and other operating revenues to outside customers and sales within Phillips by business segment and by geographic area are at market value. Operating profit excludes general corporate revenue and expense, interest, minority interest and income taxes. The company's share of earnings of affiliated companies has been included with the segment and geographic area in which the affiliate operates. Income taxes are allocated based upon each segment's taxable income reduced by applicable tax credits. Corporate assets include cash and cash equivalents.



## Analysis of Results by Business Segment

Millions of Dollars

	Petroleum*						Consolidated†
	Exploration and Production	Gas and Gas Liquids	Petroleum Products	Total	Chemicals	Corporate and Other	
1990							
<b>Sales and Other Operating Revenues</b>							
Outside customers	\$1,440	771	9,253	11,464	2,120	19	13,603
Sales within Phillips	1,600	784	574	2,958‡	219	91	—
Segment sales	\$3,040	1,555	9,827	14,422	2,339	110	13,603
<b>Operating Profit</b>	\$1,226	202	220	1,648	448	3	2,099
Other revenues	—	—	—	—	—	(33)	(33)
Minority interest	—	(2)	—	(2)	(3)	2	(3)
Nonoperating items	—	—	—	—	—	(876)	(876)
Income taxes	(676)	(80)	(75)	(831)	(154)	339	(646)
Extraordinary gain	—	—	—	—	—	101	101
Cumulative effect of change in accounting for income taxes	—	—	—	—	—	137	137
Net income	\$ 550	120	145	815	291	(327)	779
<b>Total Assets</b>	\$4,277	1,003	3,287	8,567	1,797	1,766	12,130
<b>Depreciation, Depletion and Amortization</b>	\$ 503	88	111	702	57	49	808
<b>Capital Expenditures</b>	\$ 619	64	265	948	359	76	1,383
1989							
<b>Sales and Other Operating Revenues</b>							
Outside customers	\$1,284	789	7,855	9,928	2,449	7	12,384
Sales within Phillips	1,244	576	521	2,341‡	218	67	—
Segment sales	\$2,528	1,365	8,376	12,269	2,667	74	12,384
<b>Operating Profit</b>	\$ 395	82	260	737	652	2	1,391
Other revenues	—	—	—	—	—	2	2
Minority interest	—	(1)	—	(1)	(1)	1	(1)
Nonoperating items	—	—	—	—	—	(856)	(856)
Income taxes	(293)	(31)	(84)	(408)	(212)	303	(317)
Net income	\$ 102	50	176	328	439	(548)	219
<b>Total Assets</b>	\$4,236	1,016	2,965	8,217	1,377	1,662	11,256
<b>Depreciation, Depletion and Amortization</b>	\$ 699	121	111	931	60	115	1,106
<b>Capital Expenditures</b>	\$ 451	43	161	655	156	61	872
1988							
<b>Sales and Other Operating Revenues</b>							
Outside customers	\$1,224	785	6,763	8,772	2,518	14	11,304
Sales within Phillips	1,019	564	544	2,127‡	180	80	—
Segment sales	\$2,243	1,349	7,307	10,899	2,698	94	11,304
<b>Operating Profit</b>	\$ 526	15	471	1,012	911	46	1,969
Other revenues	—	—	—	—	—	55	55
Minority interest	—	(1)	—	(1)	(20)	1	(20)
Nonoperating items	—	—	—	—	—	(889)	(889)
Income taxes	(291)	(5)	(159)	(455)	(296)	286	(465)
Net income	\$ 235	9	312	556	595	(501)	650
<b>Total Assets</b>	\$4,729	1,144	2,707	8,580	1,349	2,039	11,968
<b>Depreciation, Depletion and Amortization</b>	\$ 552	110	102	764	57	47	868
<b>Capital Expenditures</b>	\$ 377	37	177	591	130	76	797

\*Effective January 1, 1989, the method for calculating the transfer price for unfractionated natural gas liquids sold to Petroleum Products by Gas and Gas Liquids was revised. If the revision had been in effect for 1988, net income for Gas and Gas Liquids would have increased and Petroleum Products' net income would have decreased an estimated \$39 million.

†After elimination of intersegment transactions.

‡Includes intra-Petroleum Operations sales of \$2,395, \$1,835 and \$1,603 million for 1990, 1989 and 1988, respectively.

## Analysis of Results by Geographic Area

	Millions of Dollars						
	United States	Norway	United Kingdom	Africa	Other Areas	Corporate	Worldwide Consolidated*
<b>1990</b>							
<b>Sales and Other Operating Revenues</b>							
Outside customers	\$11,195	796	1,020	37	555	—	13,603
Sales within Phillips	182	317	9	283	74	—	—
Segment sales	\$11,377	1,113	1,029	320	629	—	13,603
<b>Operating Profit</b>	\$ 1,078	660	141	156	64	—	2,099
<b>Total Assets</b>	\$ 8,330	1,225	452	196	533	1,394	12,130
<b>1989</b>							
<b>Sales and Other Operating Revenues</b>							
Outside customers	\$10,549	528	732	48	527	—	12,384
Sales within Phillips	185	306	5	173	40	—	—
Segment sales	\$10,734	834	737	221	567	—	12,384
<b>Operating Profit</b>	\$ 798	345	89	109	50	—	1,391
<b>Total Assets</b>	\$ 7,694	1,193	392	202	445	1,330	11,256
<b>1988</b>							
<b>Sales and Other Operating Revenues</b>							
Outside customers	\$ 9,673	548	533	55	495	—	11,304
Sales within Phillips	195	199	5	145	48	—	—
Segment sales	\$ 9,868	747	538	200	543	—	11,304
<b>Operating Profit</b>	\$ 1,400	343	50	71	105	—	1,969
<b>Total Assets</b>	\$ 8,046	1,156	388	222	417	1,739	11,968

\*After elimination of intergeographic transactions.

Export sales totaled \$330, \$372 and \$415 million for 1990, 1989 and 1988, respectively.

## SELECTED QUARTERLY FINANCIAL DATA

	Millions of Dollars				Per Share of Common Stock	
	Sales and Other Operating Revenues	Income (Loss) before Income Taxes, Extraordinary Item and Cumulative Effect of Change in Accounting Principle	Income (Loss) before Extraordinary Item and Cumulative Effect of Change in Accounting Principle	Net Income (Loss)	Income (Loss) before Extraordinary Item and Cumulative Effect of Change in Accounting Principle	Net Income (Loss)
<b>1990</b>						
First	\$3,116	153	21	259	.09	1.06
Second	2,859	233	105	105	.43	.43
Third	3,306	316	178	178	.72	.72
Fourth	4,322	485	237	237	.92	.92
<b>1989</b>						
First	\$3,052	277	190	190	.78	.78
Second	3,264	344	197	197	.81	.81
Third	3,030	219	87	87	.36	.36
Fourth	3,038	(304)	(255)	(255)	(1.04)	(1.04)

During first quarter 1990, the company reported a \$101 million extraordinary gain (\$.41 per share) from the settlement of litigation with the Government of Iran and the National Iranian Oil Company. Effective January 1, 1990, the company adopted FASB Statement No. 96, "Accounting for Income Taxes." The cumulative effect on prior years increased reported first quarter net income \$137 million (\$.56 per share). The accounting change increased net income before extraordinary item and cumulative effect of a change in accounting principle by \$11 million (\$.05 per share), \$30 million (\$.12 per share), \$52 million (\$.21 per share) and \$37 million (\$.14 per share) for the first, second, third and fourth quarters, respectively.

During first quarter 1990, the company's results of operations were reduced by the \$90 million (\$.37 per share) loss on the sale of Offshore Insurance Management Co., parent of Walton Insurance Limited. A \$79 million environmental charge reduced fourth quarter 1990 results by \$57 million (\$.23 per share).

In 1989, the \$423 million writedown of offshore California investments decreased the company's results of operations by \$280 million (\$1.15 per share).



# OIL AND GAS OPERATIONS

Exploration and Production

## ■ Proved Reserves Worldwide

Years Ended December 31	Crude Oil					
	Millions of Barrels					
	Total	United States	Norway	United Kingdom	Africa	Other Areas
<b>Developed and Undeveloped</b>						
End of 1987	744	333	260	28	81	42
Revisions of previous estimates	56	19	29	2	—	6
Improved recovery	47	7	38	—	—	2
Purchases of reserves in place	4	4	—	—	—	—
Extensions and discoveries	11	10	—	—	—	1
Production	(80)	(39)	(21)	(7)	(8)	(5)
Sales of reserves in place	(7)	(7)	—	—	—	—
End of 1988	775	327	306	23	73	46
Revisions of previous estimates	74	15	31	—	30	(2)
Improved recovery	25	5	20	—	—	—
Purchases of reserves in place	1	1	—	—	—	—
Extensions and discoveries	21	18	—	2	—	1
Production	(79)	(37)	(25)	(5)	(9)	(3)
Sales of reserves in place	(1)	(1)	—	—	—	—
End of 1989	816	328	332	20	94	42
Revisions of previous estimates	39	31	(1)	(1)	5	5
Improved recovery	33	10	17	—	4	2
Purchases of reserves in place	8	1	—	—	—	7
Extensions and discoveries	62	13	16	31	1	1
Production	(79)	(34)	(25)	(5)	(10)	(5)
Sales of reserves in place	(3)	(3)	—	—	—	—
End of 1990	876	346	339	45	94	52
<b>Developed</b>						
End of 1987	570	261	188	27	58	36
End of 1988	592	265	214	23	50	40
End of 1989	680	261	267	17	94	41
End of 1990	723	283	285	14	90	51

• Proved reserves are those quantities of crude oil, natural gas and natural gas liquids which, upon analysis of geological and engineering data, appear with reasonable certainty to be recoverable in the future from known oil and gas reservoirs under existing economic and operating conditions. As additional information becomes available or conditions change, estimates must be revised.

• Developed reserves are those portions of proved crude oil, natural gas and natural gas liquids reserves that are recoverable through existing well bores and production equipment and facilities.

• For 1988, 38 million barrels were added as a result of an expanded waterflood project in the Ekofisk field in the Norwegian North Sea. An extension of that project resulted in an additional 20 million barrels being added in 1989. A waterflood optimization project added another 17 million barrels in 1990.

• In 1989, revisions of previous estimates in Africa are due to an upward revision in Nigeria.

• In 1990, a discovery of 16 million barrels was added for the Norwegian Embla field and a discovery of 31 million barrels was added for the Alba field in the United Kingdom. In early 1991, Phillips entered into an agreement to sell its interest in the Alba field.

Years Ended December 31	Natural Gas					
	Billions of Cubic Feet					
	Total	United States	Norway	United Kingdom	Africa	Other Areas
<b>Developed and Undeveloped</b>						
End of 1987	5,285	3,369	1,348	275	—	293
Revisions of previous estimates	449	145	304	19	—	(19)
Improved recovery	49	—	49	—	—	—
Purchases of reserves in place	7	7	—	—	—	—
Extensions and discoveries	177	166	—	—	—	11
Production	(448)	(312)	(105)	(18)	—	(13)
Sales of reserves in place	(10)	(10)	—	—	—	—
End of 1988	5,509	3,365	1,596	276	—	272
Revisions of previous estimates	33	169	(96)	(26)	—	(14)
Improved recovery	2	2	—	—	—	—
Purchases of reserves in place	17	17	—	—	—	—
Extensions and discoveries	382	358	—	—	—	24
Production	(468)	(321)	(104)	(27)	—	(16)
Sales of reserves in place	(5)	(5)	—	—	—	—
End of 1989	5,470	3,585	1,396	223	—	266
Revisions of previous estimates	26	17	14	2	—	(7)
Improved recovery	122	55	35	—	32	—
Purchases of reserves in place	42	40	—	—	—	2
Extensions and discoveries	486	444	40	—	—	2
Production	(465)	(319)	(99)	(33)	—	(14)
Sales of reserves in place	(18)	(16)	—	—	—	(2)
End of 1990	5,663	3,806	1,386	192	32	247
<b>Developed</b>						
End of 1987	4,666	3,091	1,286	68	—	221
End of 1988	4,981	3,086	1,431	256	—	208
End of 1989	4,883	3,115	1,372	213	—	183
End of 1990	4,832	3,174	1,277	185	—	196

• Natural gas production quantities may differ from gas production (delivered for sale) as reported on page 47, primarily because the quantities shown above omit the gas equivalent of the liquids, where applicable, but include gas consumed at the lease.

- In 1990, revisions of previous estimates in the United States includes a negative gaseous equivalent of the natural gas liquids due to the change in calculation to the wellhead (See natural gas liquids reserves below). Also, discoveries of 330 billion cubic feet were added in the United States for San Juan Basin coal-seam gas.
- In 1990, the waterflood optimization project in Norway added an additional 35 billion cubic feet of gas and a discovery of 40 billion cubic feet was added for the Embla field in the Norwegian North Sea.
- Natural gas reserves<sup>†</sup> are computed at 14.65 pounds per square inch absolute and 60° Fahrenheit.

Years Ended  
December 31

	Natural Gas Liquids				
	Millions of Barrels				
	Total	United States	Norway	Africa	Other Areas
<b>Developed and Undeveloped</b>					
End of 1987	165	124	39	—	2
Revisions of previous estimates	13	4	10	—	(1)
Improved recovery	2	—	2	—	—
Extensions and discoveries	4	4	—	—	—
Production	(15)	(11)	(4)	—	—
End of 1988	169	121	47	—	1
Revisions of previous estimates	20	20	(1)	—	1
Extensions and discoveries	1	1	—	—	—
Production	(15)	(11)	(4)	—	—
End of 1989	175	131	42	—	2
Revisions of previous estimates	45	41	4	—	—
Improved recovery	31	—	10	21	—
Purchases of reserves in place	2	2	—	—	—
Extensions and discoveries	5	3	2	—	—
Production	(19)	(15)	(4)	—	—
Sales of reserves in place	(1)	(1)	—	—	—
End of 1990	258	161	54	21	2
<b>Developed</b>					
End of 1987	162	123	37	—	2
End of 1988	159	118	40	—	1
End of 1989	167	124	41	—	2
End of 1990	206	154	50	—	2

- In 1990, revisions of previous estimates in the United States includes 27 million barrels due to the calculation of the natural gas liquids at the wellhead rather than at the plant tailgate.
- In 1990, the natural gas liquids reserves added in Africa are in Nigeria. Some associated natural gas reserves were added for fuel usage. The remainder of the gas will be reinjected after extraction of the liquids.

## ■ Statistics

Net Production	1990	1989	1988
	Thousands of Barrels Daily		
<b>Crude Oil</b>			
United States	95	102	110
Norway	68	66	57
United Kingdom	15	16	19
Africa	26	23	25
Other areas	14	11	11
	218	218	222

<b>Natural Gas Liquids</b>			
United States <sup>†</sup>	3	3	—
Norway	10	12	12
	13	15	12

<b>Natural Gas—Wet Basis</b>	Millions of Cubic Feet Daily		
United States (less gas equivalent of liquids shown above)	927	874	851
Norway*	248	264	259
United Kingdom*	83	71	47
Other areas	38	38	32
	1,296	1,247	1,189

\*Dry basis.

<b>Average Sales Prices</b>	1990	1989	1988
<b>Crude Oil—Per Barrel</b>			
United States	\$20.78	16.60	13.41
Norway	24.25	18.18	14.98
United Kingdom	23.25	18.08	15.25
Africa	24.09	18.24	15.34
Other areas	18.01	12.58	11.29
Outside United States	23.37	17.72	14.77
Worldwide	22.28	17.21	14.11

<b>Natural Gas Liquids—Per Barrel</b>			
United States <sup>†</sup>	13.77	9.33	—
Norway	10.57	7.87	8.89

<b>Natural Gas (Lease)—Per Thousand Cubic Feet</b>			
United States	1.68	1.59	1.53
Norway	2.84	2.28	2.75
United Kingdom	3.12	2.91	2.40
Other areas	1.28	1.27	1.37
Outside United States	2.77	2.30	2.60
Worldwide	2.06	1.84	1.88

<sup>†</sup>During 1989, 11 natural gas liquids plants were transferred from Gas and Gas Liquids to Exploration and Production.

<b>Average Production (Lifting) Costs* —Per Equivalent Barrel of Oil</b>	1990	1989	1988
United States	\$4.74	4.28	4.34
Norway	4.48	6.59	5.78
United Kingdom	3.98	3.15	2.60
Africa	2.54	2.80	4.50
Other areas	5.59	5.57	4.95

\*Production (lifting) costs consist of costs incurred to operate and maintain wells and related equipment and facilities used in the production of petroleum liquids and natural gas. These costs also include applicable taxes other than income taxes, depreciation of support equipment, cost of retirements, and administrative expenses associated with the production activity. Also included are expenses of \$7, \$120 and \$41 million in 1990, 1989 and 1988, respectively, to construct a concrete wave barrier to protect a facility offshore Norway. Excluded are depreciation, depletion and amortization of capitalized acquisition, exploration and development costs.



## Acreage at December 31, 1990

	Thousands of Acres	
	Gross	Net
<b>Developed</b>		
United States	2,332	1,551
Norway	45	17
United Kingdom	24	6
Africa	98	25
Other areas	452	122
	2,951	1,721
<b>Undeveloped</b>		
United States	3,453	2,355
Norway	1,037	247
United Kingdom	1,450	509
Africa	34,543	12,155
Asia	2,774	1,289
Australia	2,147	563
Canada	2,067	463
Other areas	8,284	2,804
	55,755	20,385

## Net Wells Completed\*

	Productive			Dry		
	1990	1989	1988	1990	1989	1988
<b>Exploratory</b>						
United States	10	8	7	16	16	12
Norway	1	**	**	**	**	—
United Kingdom	1	**	1	2	2	1
Africa	—	1	1	1	—	**
Other areas	1	2	8	4	7	7
	13	11	17	23	25	20
<b>Development</b>						
United States	176	102	138	20	8	12
Norway	1	5	4	—	—	—
United Kingdom	1	1	2	—	1	**
Africa	1	1	1	—	—	**
Other areas	3	5	14	1	—	2
	182	114	159	21	9	14

\*Excludes farmout arrangements.

\*\*Phillips' total proportionate interest in wells completed during the year was less than one.

## Wells at Year-End 1990

	In Progress*		Productive**			
			Oil		Gas	
	Gross	Net	Gross	Net	Gross	Net
United States	130	85	26,722	6,618	6,469	3,155
Norway	9	3	109	39	42	12
United Kingdom	27	8	28	7	45	9
Africa	14	5	191	47	5	1
Other areas	10	4	1,019	382	323	91
	190	105	28,069	7,093	6,884	3,268

\*Includes wells which have been temporarily suspended.

\*\*Includes 1,388 gross and 525 net multiple completion wells.

## Results of Operations

	Millions of Dollars					
	Total	United States	Norway	United Kingdom	Africa	Other Areas
<b>1990</b>						
Sales	\$1,248	587	303	223	21	114
Transfers	1,528	706	620	—	202	—
Total revenues	2,776	1,293	923	223	223	114
Production (lifting) costs	740	435	196	42	24	43
Exploration expenses	302	188	13	24	36	41
Depreciation, depletion, amortization and retirements	475	321	72	53	9	20
	1,259	349	642	104	154	10
Provision for income taxes	761	133	452	31	143	2
Results of operations for producing activities	\$ 498	216	190	73	11	8*
<b>1989</b>						
Sales	\$1,093	557	247	188	34	67
Transfers	1,182	612	454	—	116	—
Total revenues	2,275	1,169	701	188	150	67
Production (lifting) costs	774	391	292	33	24	34
Exploration expenses	422	324**	12	28	28	30
Depreciation, depletion, amortization and retirements	675	537**	75	45	8	10
	404	(83)	322	82	90	(7)
Provision for income taxes	311	(26)	213	29	91	4
Results of operations for producing activities	\$ 93	(57)	109	53	(1)	(11)
<b>1988</b>						
Sales	\$1,073	521	316	148	27	61
Transfers	967	553	310	—	104	—
Total revenues	2,040	1,074	626	148	131	61
Production (lifting) costs	722	390	236	26	41	29
Exploration expenses	315	246	5	19	10	35
Depreciation, depletion, amortization and retirements	529	382	65	51	18	13
	474	56	320	52	62	(16)
Provision for income taxes	278	21	190	18	48	1
Results of operations for producing activities	\$ 196	35	130	34	14	(17)

\*Excludes extraordinary gain of \$101 million resulting from settlement with Iran for assets seized in 1979.

\*\*Exploration expenses and depreciation, depletion, amortization and retirements in 1989 include \$130 and \$183 million, respectively, for the writedown of offshore California investments.

- Results of Operations excludes U.S. natural gas liquids extraction plants and related gas systems, as well as downstream petroleum and chemical activities. In addition, there is no deduction for corporate administrative expenses or interest. Results of operations for producing activities differs from Exploration and Production net income as shown on page 28, primarily because Results of Operations excludes marketing related expenses, gains or losses on sales of assets, foreign currency gains and losses, and equity in earnings from companies which own no hydrocarbon reserves.
- Transfers are valued at prices which approximate market.
- Production (lifting) costs consist of costs incurred to operate and maintain wells and related equipment and facilities used in the production of petroleum liquids and natural gas. These costs also include applicable taxes other than income taxes, depreciation of support equipment, cost of retirements, and administrative expenses associated with the production activity. Also included are expenses of \$7, \$120 and \$41 million in 1990, 1989 and 1988, respectively, to construct a concrete wave barrier to protect a facility offshore Norway. Excluded are depreciation, depletion and amortization of capitalized acquisition, exploration and development costs.
- Exploration expenses include dry hole, leasehold impairment, geological and geophysical expenses and the cost of retaining undeveloped leaseholds. Also included are applicable taxes other than income taxes, depreciation of support equipment and administrative expenses associated with the exploration activity.
- Depreciation, depletion, amortization and retirements differs from that shown in Analysis of Results by Business Segment on page 44, as cost of retirements and depreciation of support equipment are included with production or exploration expenses as applicable in Results of Operations.
- The provision for income taxes is computed by adjusting each country's income before income taxes for permanent differences related to the oil and gas producing activities that are reflected in the company's consolidated income tax expense for the period and then multiplying the result by the country's statutory tax rate.

## ■ Costs Incurred

	Millions of Dollars				
	Total	United States	Norway	United Kingdom	Other Areas
<b>1990</b>					
Acquisition	\$ 96	32	—	—	1 63
Exploration	307	150	19	35	47 56
Development	374	250	73	23	10 18
	<b>\$777</b>	<b>432</b>	<b>92</b>	<b>58</b>	<b>58 137</b>
<b>1989</b>					
Acquisition	\$ 46	36	—	—	1 9
Exploration	268	146	20	34	34 34
Development	282	144	90	20	2 26
	<b>\$596</b>	<b>326</b>	<b>110</b>	<b>54</b>	<b>37 69</b>
<b>1988</b>					
Acquisition	\$ 27	19	—	—	4 4
Exploration	171	101	11	30	10 19
Development	289	172	75	22	6 14
	<b>\$487</b>	<b>292</b>	<b>86</b>	<b>52</b>	<b>20 37</b>

- Costs incurred include capitalized and expensed items.
- Acquisition costs include the costs of acquiring undeveloped oil and gas leaseholds. It also includes proved properties of \$10, \$17 and \$9 million in the United States for the years 1990, 1989 and 1988, respectively, and \$50 million in Other Areas for 1990.
- Exploration costs include geological and geophysical expenses, the cost of retaining undeveloped leaseholds, and exploratory drilling costs.
- Development costs include the cost of drilling and equipping development wells and building related production facilities for extracting, treating, gathering and storing petroleum liquids and natural gas.



## ■ Capitalized Costs

At December 31

Millions of Dollars

	Total	United States	Norway	United Kingdom	Africa	Other Areas
<b>1990</b>						
Proved properties	<b>\$8,572</b>	5,263	2,051	623	303	332
Unproved properties	<b>559</b>	388	4	79	29	59
	<b>9,131</b>	5,651	2,055	702	332	391
Accumulated depreciation, depletion and amortization	<b>5,444</b>	3,616	1,068	448	188	124
	<b>\$3,687</b>	2,035	987	254	144	267
<b>1989</b>						
Proved properties	<b>\$8,251</b>	5,116	1,959	594	292	290
Unproved properties	<b>583</b>	436	15	73	16	43
	<b>8,834</b>	5,552	1,974	667	308	333
Accumulated depreciation, depletion and amortization	<b>5,156</b>	3,450	998	405	175	128
	<b>\$3,678</b>	2,102	976	262	133	205

- Capitalized costs include only the cost of equipment and facilities for oil and gas producing activities. Excluded are investments in U.S. natural gas liquids extraction plants and related systems, as well as downstream manufacturing, distribution and marketing facilities.
- Proved properties include capitalized costs for oil and gas leaseholds holding proved reserves, development wells and related equipment and facilities (including uncompleted development well costs) and support equipment.
- Unproved properties include capitalized costs for oil and gas leaseholds under exploration (including those where petroleum liquids and natural gas were found but not in sufficient quantities to be considered proved reserves) and uncompleted exploratory well costs, including those exploratory wells under evaluation.

## ■ Standardized Measure of Discounted Future Net Cash Flows Relating to Proved Oil and Gas Reserve Quantities

Amounts are computed using year-end prices and costs (adjusted only for existing contractual changes), appropriate statutory tax rates and a prescribed 10 percent discount factor. Continuation of year-end economic conditions also is assumed. The calculation is based on estimates of proved reserves, which are revised over time as new data becomes available. Probable or possible reserves which may become proved in the future are not considered. The calculation also requires assumptions as to the timing of future production of proved reserves, and the timing and amount of future development and production costs.

While due care was taken in its preparation, the company cautions the reader that this data does not purport to represent the fair market value of the company's oil and gas properties, or a fair estimate of the present value of cash flows to be obtained from their development and production. Also, due to the situation in the Middle East and the related uncertainty, prices during the last part of 1990 were extremely volatile, and it is not known whether the price levels used in these calculations will be sustained.

## Discounted Future Net Cash Flows

	Millions of Dollars					
	Total	United States	Norway	United Kingdom	Africa	Other Areas
<b>1990</b>						
Future cash inflows	\$35,736	14,420	15,142	1,891	2,894	1,389
Less:						
Future production costs	8,643	4,782	2,771	274	237	579
Future development costs	2,173	1,381	364	301	96	31
Future income tax provisions	14,299	2,355	9,073	628	2,117	126
Future net cash flows	10,621	5,902	2,934	688	444	653
10% annual discount	4,776	2,650	1,288	304	206	328
Discounted future net cash flows	\$ 5,845	3,252	1,646	384	238	325
<b>1989</b>						
Future cash inflows	\$27,857	13,314	10,674	978	1,970	921
Less:						
Future production costs	7,311	4,070	2,369	174	206	492
Future development costs	1,799	1,359	286	114	9	31
Future income tax provisions	9,869	2,229	5,854	343	1,400	43
Future net cash flows	8,878	5,656	2,165	347	355	355
10% annual discount	4,127	2,688	992	85	171	191
Discounted future net cash flows	\$ 4,751	2,968	1,173	262	184	164
<b>1988</b>						
Future cash inflows	\$23,056	10,217	9,572	1,260	1,174	833
Less:						
Future production costs	7,768	3,877	3,171	173	152	395
Future development costs	1,777	944	451	113	88	181
Future income tax provisions	6,749	1,259	4,254	499	737	—
Future net cash flows	6,762	4,137	1,696	475	197	257
10% annual discount	2,975	1,795	810	139	87	144
Discounted future net cash flows	\$ 3,787	2,342	886	336	110	113

## Sources of Change in Discounted Future Net Cash Flows

	Millions of Dollars		
	1990	1989*	1988*
Discounted future net cash flows at the beginning of the year	\$ 4,751	3,787	3,141
Changes during the year			
Revenues less production costs for the year	(2,036)	(1,501)	(1,318)
Net change in prices and production costs for the year	2,782	2,493	361
Extensions, discoveries and improved recovery less estimated future costs	1,617	698	478
Development costs for the year	374	282	289
Changes in estimated future development costs	(472)	(148)	(164)
Purchases of reserves in place less estimated future costs	135	21	—
Sales of reserves in place less estimated future costs	(49)	(4)	(44)
Revisions of previous quantity estimates	388	11	1,067
Accretion of discount	921	694	569
Net change in income taxes	(2,574)	(1,622)	(658)
Other	8	40	66
Total changes	1,094	964	646
Discounted future net cash flows at year-end	\$ 5,845	4,751	3,787

\*Certain amounts have been reclassified to conform to the 1990 presentation.

- The net change in prices and production costs is the beginning of the year reserve production forecast multiplied by the net annual change in the per unit sales price and production cost, discounted at 10 percent.
- Purchases and sales of reserves in place, and extensions, discoveries and improved recovery are production forecasts of the applicable reserve quantities for the year multiplied by the end of the year sales price, less future estimated costs, discounted at 10 percent.
- The accretion of discount is 10 percent of the prior year's discounted future cash inflows less future production and development costs.
- The net change in income taxes is the annual change in the discounted future income tax provisions.



## FIVE-YEAR FINANCIAL REVIEW

## PHILLIPS PETROLEUM COMPANY

Millions of Dollars Except as Indicated

### Selected Income Data

Sales and other operating revenues by product

	1990	1989	1988	1987	1986
Crude oil	\$ 3,660	3,225	2,717	2,879	2,447
Natural gas	1,564	1,443	1,400	1,348	1,567
Refined products	5,918	4,861	4,258	4,251	3,767
Chemical products	2,074	2,410	2,482	1,878	1,670
Other sales and services	387	445	447	365	337
Total	13,603	12,384	11,304	10,721	9,788
Income before extraordinary item and cumulative effect of accounting change	541	219	650	35	228
Net income	779	219	650	35	228

### Selected Balance Sheet Data

Current assets	\$ 3,322	2,876	3,062	2,885	2,802
Properties, plants and equipment (net)	8,301	7,832	8,417	8,772	9,186
Total assets	12,130	11,256	11,968	12,111	12,403
Current liabilities	2,910	2,706	2,468	2,402	2,234
Long-term debt	3,839	3,939	4,761	5,419	5,758
Deferred income tax liability	1,283	1,721	1,874	1,705	1,685
Redeemable preferred stock	—	—	—	205	270
Common stockholders' equity	2,719	2,132	2,113	1,617	1,724

### Selected Statement of Cash Flows Data

Net cash provided by operating activities	\$ 1,104	1,654	1,865	1,162	1,305
Capital expenditures					
Exploration and Production	619	451	377	391	339
Gas and Gas Liquids	64	43	37	43	86
Petroleum Products	265	161	177	131	75
Chemicals	359	156	130	78	46
Corporate and Other	76	61	76	94	100
Total	1,383	872	797	737	646
Investment purchases	47	122	59	35	23
Dividends paid					
Common	256	229	157	137	159
Preferred	—	—	11	19	24

### Other Data

Income before extraordinary item and cumulative effect of accounting change					
As percent of total revenues	3.9%	1.8	5.7	.3	2.3
As percent of average total assets	4.5%	1.9	5.4	.3	1.7
As percent of average common stockholders' equity	24.4%	9.5	35.8	2.1	13.5
Percent of long-term debt to capital	58.5%	64.9	69.3	74.8	74.3
Current ratio	1.1	1.1	1.2	1.2	1.3
Per average common share outstanding					
Income before extraordinary item and cumulative effect of accounting change	\$ 2.18	.90	2.72	.06	.89
Net income	\$ 3.13	.90	2.72	.06	.89
Cash dividends declared	\$ 1.03	.94	.66	.60	.70
Common stockholders' equity per share	\$ 10.51	8.74	8.69	7.08	7.55
Market price per common share					
High	\$ 31.13	30.13	22.38	18.75	12.75
Low	\$ 22.50	19.13	12.13	10.00	8.25
Close	\$ 26.13	25.25	19.50	14.00	11.75
Common shares outstanding at year-end (in millions)	258.7	243.9	243.3	228.4	228.3
Common stockholders at year-end (in thousands)	89.7	94.0	96.9	100.1	109.0
Gross payroll including employee benefits	\$ 1,157	1,039	1,053	998	974
Employees at year-end (in thousands)	22.4	21.8	21.0	22.5	21.8

## FIVE-YEAR OPERATING REVIEW

### Exploration and Production

	1990	1989	1988	1987	1986
	Thousands of Barrels Daily				
<b>Net Crude Oil Production</b>					
United States	95	102	110	113	124
Norway	68	66	57	46	52
United Kingdom	15	16	19	22	23
Africa	26	23	25	25	29
Canada	5	6	5	5	4
Southeast Asia	3	1	2	2	1
Latin America	4	4	4	5	5
Australia	2	—	—	—	—
	218	218	222	218	238

### Net Natural Gas Liquids Production

	1990	1989	1988	1987	1986
United States*	3	3	—	—	—
Norway	10	12	12	8	10
	13	15	12	8	10

\*During 1989, 11 natural gas liquids plants were transferred from Gas and Gas Liquids to Exploration and Production.

### Net Natural Gas Production—Wet Basis

	Millions of Cubic Feet Daily				
United States (less gas equivalent of liquids shown above)	927	874	851	772	820
Norway*	248	264	259	241	217
United Kingdom*	83	71	47	43	54
Canada	38	38	32	30	29
	1,296	1,247	1,189	1,086	1,120

\*Dry basis.

### Net Oil and Gas Acreage

	Millions of Acres				
United States	4	4	5	5	6
Europe	1	1	1	2	1
Africa	12	12	8	8	2
Canada	1	1	1	1	3
Asia	1	5	5	1	1
Other areas	3	2	—	—	—
	22	25	20	17	13

### Oil and Gas Wells

	Net Wells				
United States					
Oil	6,618	7,195	7,292	7,424	7,861
Gas and condensate	3,155	2,736	2,721	2,715	2,749
Outside United States					
All wells	588	580	572	552	576
	10,361	10,511	10,585	10,691	11,186

### Well Completions

	1990	1989	1988	1987	1986
United States					
Exploratory	26	24	19	31	32
Development	196	110	150	128	92
Outside United States					
Exploratory	10	13	18	14	7
Development	7	13	23	5	8
	239	160	210	178	139

## PHILLIPS PETROLEUM COMPANY

### Gas and Gas Liquids (United States)

	1990	1989	1988	1987	1986
	Millions of Cubic Feet Daily				
<b>Natural Gas Purchases</b>					
Outside Phillips	1,351	1,399	1,542	1,602	1,531
Phillips	390	393	377	357	395
	1,741	1,792	1,919	1,959	1,926

**Natural Gas Processed\*** 1,536 1,600 1,859 1,910 2,041

\*In addition, Exploration and Production processed 89 and 94 million cubic feet of natural gas daily in the United States in 1990 and 1989, respectively.

### Natural Gas Sales

	1990	1989	1988	1987	1986
Residue gas					
Outside Phillips	964	1,012	1,034	1,044	1,009
Phillips	175	166	138	142	158
	1,139	1,178	1,172	1,186	1,167
Liquefied natural gas	101	99	99	93	96
	1,240	1,277	1,271	1,279	1,263

### Net Natural Gas Liquids Plant Production\*

	Thousands of Barrels Daily				
From leasehold gas	28	28	30	29	36
From purchased gas	113	121	144	145	156
	141	149	174	174	192

\*In addition, Exploration and Production produced 3 thousand barrels of natural gas liquids daily in the United States in 1990 and 1989.

### Petroleum Products

#### Refinery Operations

	1990	1989	1988	1987	1986
Crude oil capacity	305	305	305	305	300
Crude oil runs	297	293	301	302	301
Natural gas liquids processing capacity	227	227	227	223	223
Natural gas liquids processed	173	172	200	195	201

### Petroleum Products Sold

	1990	1989	1988	1987	1986
United States					
Automotive gasoline	263	277	275	256	243
Aviation fuels	33	34	36	32	31
Distillates	97	95	100	98	93
Liquefied petroleum gas	93	91	95	90	99
Other products	38	38	34	37	47
	524	535	540	513	513
Outside United States	55	53	45	42	41
	579	588	585	555	554

### Marketing Outlets (in thousands)

	1990	1989	1988	1987	1986
	9	10	11	12	12

### Chemicals

#### Selected Outside Sales

	Millions of Pounds				
Ethylene	1,124	576	720	903	803
Polyethylene*	607	1,541	1,612	1,633	1,410
Propylene	55	41	131	120	64
Polypropylene	335	397	402	239	205

\*U.S. polyethylene production facilities were destroyed by an explosion and fire in October 1989.



## BOARD OF DIRECTORS

As of March 1, 1991



**W. Wayne Allen**, 54, senior vice president of exploration and production since 1989. Previously, vice president, international exploration and production (1988); general manager of western region exploration and production (1986). Joined Phillips 1961; elected to board 1989.



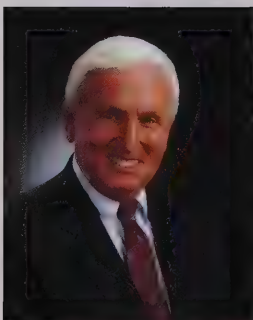
**Robert E. Chappell, Jr.**, 54, senior executive vice president and chief investment officer, Metropolitan Life Insurance Company. Lives in Glen Ridge, New Jersey. Elected to Phillips' board 1990. Also a director of Chart House Enterprises, Inc.; First Brands Corporation; MetLife Securities, Inc.; State Street Research & Management Company. (2), (5)



**Norman R. Augustine**, 55, chairman of the board and chief executive officer, Martin Marietta Corporation. Lives in Potomac, Md. Elected to Phillips' board 1989. Also a director of Riggs National Corporation and The Procter & Gamble Company. (3), (5)



**Glenn A. Cox**, 61, president and chief operating officer since 1985. Previously, executive vice president (1980); vice president, management information and control (1974). Joined Phillips 1956; elected to board 1982. Also a director of BancOklahoma Corp. (1)



**George B. Beitzel**, 62, retired senior vice president and director, International Business Machines Corporation. Lives in Chappaqua, N.Y. Elected to Phillips' board 1980. Also a director of Bankers Trust New York Corporation and its subsidiary, Bankers Trust Company; FlightSafety International, Inc.; Roadway Services, Inc.; Rohm and Haas Company; Square D Company; and a member of the advisory board of International Business Machines. (3), (4)



**James B. Edwards**, 63, president of the Medical University of South Carolina; former U.S. secretary of energy and former governor of South Carolina. Lives in Mount Pleasant, S.C. Elected to Phillips' board 1983. Also a director of The South Carolina National Corporation and its subsidiary, The South Carolina National Bank; Brendle's, Inc.; SCANA Corporation; Chemical Waste Management, Inc.; Imo Industries Inc.; Encyclopaedia Britannica, Inc.; National Data Corporation; Communications Satellite Corporation. (2), (3)



**Charles L. Bowerman**, 51, senior vice president responsible for petroleum products since 1988. Previously, vice president of marketing (1984); marketing operations manager (1982). Joined Phillips 1961; elected to board 1989.



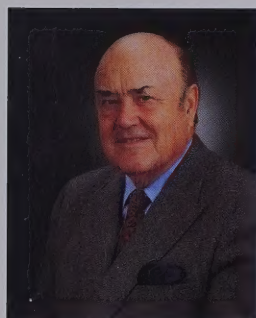
**Robert F. Froehle**, 68, president and chief executive officer and director of IDS Mutual Fund Group; former chairman of the board, The Equitable Life Assurance Society of the United States. Lives in Minneapolis, Minn. Elected to Phillips' board 1984. Also a director of Square D Company and the Public Oversight Board of the American Institute of Certified Public Accountants. Also chairman and director of the Institute for Defense Analyses. (1), (2), (5)



**E. Douglas Kenna**, 66, chairman of the board of directors, Carlisle Companies, Inc. Lives in N. Palm Beach, Fla. Elected to Phillips' board 1977. Also a director of Burnley Corporation; Fleet/Norstar Financial Group; Harrow Corporation; Heritage Media, Inc. (2), (4)

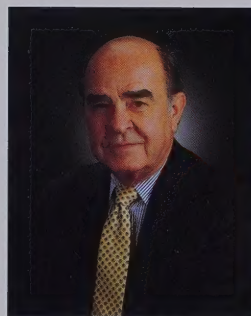


**David J. Tippeconnic**, 51, senior vice president responsible for planning and technology since 1988. Previously, vice president of human resources and services (1986); general manager of Sweeny refinery (1981). Joined Phillips 1961; elected to board 1989.

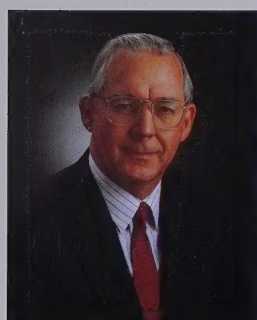


**Melvin R. Laird**, 68, director and senior counsellor for national and international affairs, The Reader's Digest Association, Inc.; former nine-term U.S. congressman, secretary of defense and presidential counsellor. Lives in Bethesda, Md. Elected to Phillips' board 1976. Also a director of Northwest Airlines, Inc.; Metropolitan Life Insurance Company; Science Applications International Corporation; Communications Satellite Corporation; Martin Marietta Corporation; IDS Mutual Fund Group;

Wallace-Reader's Digest Funds; and the Public Oversight Board of the American Institute of Certified Public Accountants. (1), (4), (5)



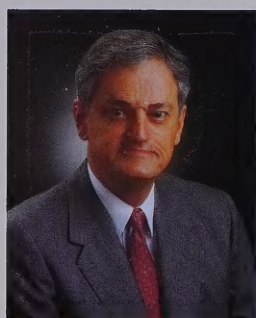
**W. Clarke Wescoe**, 70, retired chairman of the board of directors, Sterling Drug Inc., a diversified pharmaceutical company; former chancellor, University of Kansas. Lives in Minneapolis, Minn. Elected to Phillips' board 1963. Also a director of The New York Stock Exchange. (2), (3)



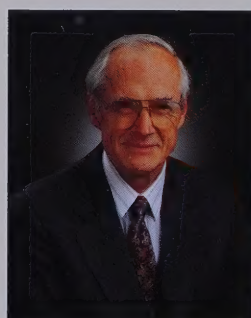
**C. J. Silas**, 58, chairman of the board of directors and chief executive officer since 1985. Previously, president and chief operating officer (1982); executive vice president (1980); senior vice president, natural resources (1978); vice president, gas and gas liquids (1976). Joined Phillips 1953; elected to board 1982. (1)



**Dolores D. Wharton**, 63, president of The Fund for Corporate Initiatives, Inc., a nonprofit organization devoted to strengthening the role of minorities and women in the corporate world. Lives in New York, N.Y. Elected to Phillips' board 1976. Also a director of Gannett Co., Inc.; and Kellogg Company. (1), (3), (5)



**Bill M. Thompson**, 58, executive vice president, responsible for Phillips' downstream businesses, since 1988. Previously, senior vice president, planning and technology (1986); vice president, corporate planning and development (1983). Joined Phillips 1954; elected to board 1988.



**Francis M. Wheat**, 70, advisory partner, and former senior partner, law firm of Gibson, Dunn & Crutcher. Lives in Los Angeles, Calif. Elected to Phillips' board 1976. (2), (5)



## PRINCIPAL OFFICERS

As of March 1, 1991

**C. J. (Pete) Silas**, Chairman of the Board of Directors and Chief Executive Officer

**Glenn A. Cox**, President and Chief Operating Officer

**Bill M. Thompson**, Executive Vice President

**W. Wayne Allen**, Senior Vice President Exploration and Production

**Charles L. Bowerman**, Senior Vice President Petroleum Products

**William G. Paul**, Senior Vice President and General Counsel

**Ken L. Smalley**, Senior Vice President

**David J. Tippeconnic**, Senior Vice President

### Other Corporate Officers

**Lavele L. Frantz**, Vice President Human Resources and Services

**F. Ben Jones**, Vice President Research and Development

**John C. Mihm**, Vice President Corporate Engineering

**James J. Mulva**, Vice President, Treasurer and Chief Financial Officer

**Joseph W. O'Toole**, Vice President and General Tax Officer

**Richard I. Robinson**, Vice President Refining

**Ted L. Sandridge**, Vice President International Exploration and Production

**John N. Scott**, Vice President Quality, Environment and Safety

**Ray G. Steiner**, Vice President Supply and Transportation

**John R. VanBuskirk**, Vice President Plastics

**John L. Whitmire**, Vice President North America Exploration and Production

**J. Bryan Whitworth**, Vice President Corporate Affairs

**Charles L. Wyndham**, Vice President Exploration

**James A. Kelly**, Comptroller

**Lewis E. Burnham**, General Auditor

**George C. Meese**, Secretary

**Leonard F. Francis**, Assistant General Tax Officer

**David W. Casselberry**, Assistant Treasurer

**Larry L. McCall**, Assistant Treasurer

**Joe M. McKee**, Assistant Treasurer

**M. Richard Schmutz**, Assistant Comptroller

**Jerry G. Wilson**, Assistant Comptroller

**Donald L. Cone**, Assistant Secretary

**Terry B. Nance**, Assistant Secretary

## MANAGEMENT & DIRECTOR CHANGES

• Veteran directors **W. Clarke Wescoe** and **Francis M. Wheat** will retire from the Phillips board, effective May 13, 1991. Wescoe is the company's senior-most director, having served some 28 years; Wheat will retire after 15 years' service.

• **Robert E. Chappell, Jr.** was elected a member of the Phillips board of directors in December 1990. Chappell is senior executive vice president and chief investment officer of Metropolitan Life Insurance Company.

• **Charles F. Cook**, formerly vice president of research and development, retired December 31, 1990, with some 32 years' service. Cook had been on special assignment since March 1 of that year. **F. Ben Jones**, formerly downstream planning and budgeting manager, was elected vice president of research and development, replacing Cook.

• **James J. Mulva**, vice president and treasurer, was elected chief financial officer, assuming responsibilities formerly held by **R. E. (Gene) Bonnell**. Bonnell, senior vice president finance, took early retirement March 1, 1990, after more than 33 years' service.



## STOCKHOLDER INFORMATION

### **Annual Meeting Slated for Bartlesville**

Phillips' annual meeting of stockholders will be held at the following time and place:

May 13, 1991; 10:00 a.m.  
Adams Building  
Fourth Street and Keeler Avenue  
Bartlesville, Okla.

Notice of the meeting and proxy material are being sent to all stockholders.

### **Dividend Reinvestment Plan Available**

Phillips' dividend reinvestment plan enables shareholders to buy additional shares with their common stock dividends. Participants also may make commission-free purchases of company stock through direct cash payment. About 26 percent of the company's shareholders of record were enrolled in the program in early 1991. Contact Stockholder Records in Bartlesville for details.

### **Information Requests Welcome**

Stockholders are welcome to refer questions or comments to the following offices:

■ **Stockholder Records, in care of the company's Bartlesville address; phone toll-free, 1-800-356-0066 (in Oklahoma, 1-800-722-0660).**

(The stockholder records section is available to handle your questions or concerns regarding dividends, certificates, the dividend reinvestment plan or electronic deposit of security payments. Requests for additional copies of the annual report also should be referred to this section.)

■ **Investor Relations in New York City  
(E. K. Grigsby, manager, 212/397-9766).**

■ **Financial Communications in Bartlesville (918/661-5126).**

### **Form 10-K/Contributions Report Available**

Copies of the Phillips Annual Report on Form 10-K, as filed with the Securities and Exchange Commission, are available without charge by writing to the Office of the Secretary in Bartlesville. Copies of the company's annual contributions report are also available free of charge by writing to the Office of the Secretary.

### **Principal Offices**

Bartlesville, Okla. 74004

630 Fifth Avenue  
New York, N.Y. 10111

306 S. State Street  
Dover, Del. 19901

### **Stock Transfer Offices**

Manufacturers Hanover Trust Company  
Corporate Trust  
450 W. 33rd Street  
New York, N.Y. 10001

Montreal Trust Company  
151 Front Street West  
Toronto, Ontario  
Canada M5J 2N1

### **Registrars**

Manufacturers Hanover Trust Company  
Corporate Trust  
450 W. 33rd Street  
New York, N.Y. 10001

Montreal Trust Company  
151 Front Street West  
Toronto, Ontario  
Canada M5J 2N1





**PHILLIPS PETROLEUM COMPANY**  
BARTLESVILLE, OKLAHOMA 74004

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